



SITE INSPECTION

**BORDEN CHEMICAL
PRINTING INK DIVISION
CAMDEN, CAMDEN COUNTY
EPA ID.: NJD071462279**



**New Jersey Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
Bureau of Site Assessment**

BORDEN CHEMICAL PRINTING INK DIVISION
1625 FEDERAL STREET
CAMDEN, CAMDEN COUNTY, NEW JERSEY
EPA ID # NJD071462279

TABLE OF CONTENTS

MAPS

1. UNITED STATES GEOLOGICAL SURVEY (USGS) TOPOGRAPHIC MAP - CAMDEN QUADRANGLE
2. SITE MAP
3. CAMDEN CITY TAX MAP
4. CAMDEN COUNTY ROAD MAP (1986)
5. NEW JERSEY ATLAS BASE MAP - SHEET 31
6. NEW JERSEY ATLAS GEOLOGIC OVERLAY - SHEET 31
7. NEW JERSEY ATLAS WATER SUPPLY OVERLAY - SHEET 31
8. COMPUTER GENERATED WATER WITHDRAWAL POINTS MAP

ATTACHMENTS

- A. RCRA PART A PERMIT APPLICATION; NOVEMBER 17, 1980
- B. INSPECTION REPORT; MARCH 25, 1981
- C. INSPECTION REPORT; MAY 24, 1983
- D. INSPECTION REPORT; JANUARY 11, 1989
- E. COMPLAINT, COMPLIANCE ORDER AND NOTICE OF OPPORTUNITY FOR HEARING; JANUARY 15, 1982
- F. CONSENT AGREEMENT AND FINAL COMPLIANCE ORDER; JANUARY 18, 1983
- G. BORDEN CHEMICAL RCRA CLOSURE PLAN
- H. BORDEN CHEMICAL CLOSURE PROCEDURES
- I. RFA-VSI FORM; DECEMBER 18, 1990
- J. STACK LOG

NARRATIVE

BORDEN CHEMICAL PRINTING INK DIVISION
1625 FEDERAL STREET
CAMDEN, CAMDEN COUNTY, NEW JERSEY
EPA ID # NJD071462279

GENERAL INFORMATION AND SITE HISTORY

Borden Chemical Printing Ink Division (Borden) is located on 8.5 acres and occupies Block 1184, Lots 1 and 5 in a highly industrialized section of Camden, Camden County. The Cooper River lies approximately 500 feet to the west and the Penn Central Railroad borders the north side of the facility. A building which was used by Borden at one time as a product storage warehouse is adjacent to the west side of the facility. A tire shop and the Bowers Delight Flea Market are currently located in this building. There are several houses approximately 0.25 mile to the south and east of the site. The population within a 4-mile radius of the site is 520,700.

The site is currently owned by Lynkram (Rich-Oe Enterprises) which manufactures wire display racks. Lynkram purchased the property on July 11, 1983 from Borden. Borden owned the facility from 1974 until 1983, however, only operated until May 1981. The property was sold to Borden by Cities Service Company (Cities) on April 8, 1974. Cities had manufactured printing inks and all equipment and employees were retained by Borden after the transfer of property. Cities owned the property from at least the 1940s. Ownership records from before this period were not found; however, the building appears to have existed since at least the early 1900s.

SITE OPERATIONS OF CONCERN

Borden manufactured oil- and water-based printing inks from 1974 until operations ceased on May 31, 1981. Borden utilized six 1,000-gallon processing tanks, which extended vertically and through the second floor of the building, for the storage of colorants. The oil-based printing ink was manufactured from oleo-resinate vehicles into which colorants were dispersed by the use of mixing equipment and three-roll mill dispersers. The water-based inks (hydrosperse) utilized a different resin system and had a much lower viscosity in the final product. High speed mixing equipment with a semicontinuous media mill was used for the dispersion of the water-based inks. After quality control checks, the final ink was packed into shipping containers and distributed to customers. A third type of product, dispersed carbon black in water, was also produced at the plant. The type of equipment used in this process was similar to that used in the manufacturing of water-based inks except the dispersion equipment consisted of large steel ball mills and no mixers were involved. Wastes generated at the site were spent solvents which included toluene, xylene and methyl isobutyl ketone (MIBK) along with printing ink and varnish wastes. The wastes were generated from cleaning the equipment and from unusable inks and varnishes.

Hazardous wastes were drummed and stored on a storage pad located at the southwest corner of the building adjacent to the former storage building and railroad property. The 3,750 square-foot pad had a capacity to hold 500 55-gallon drums. An aerial photograph interpretation revealed that prior to 1965, the drum storage area was once the concrete flooring of a former building. Sometime after 1965 the building was destroyed, but the

flooring was retained for use as a storage pad. Several drums were observed on the pad in the March 17, 1979 aerial photograph.

During a March 25, 1981 NJDEP Resource Conservation Recovery Act (RCRA) generator inspection of Borden, approximately 300 drums of oil-and water-based ink wastes were noted on the drum storage area. The drums showed severe signs of weathering and about 15 appeared to be leaking. Spillage was evident throughout the area.

Borden submitted a RCRA Part A permit application and notification of hazardous waste activity on November 17, 1980. The permit application specified for up to 150,000 gallons of hazardous waste storage in containers. Borden was subsequently classified as a treatment, storage and disposal facility (TSD). Production activity was terminated on May 31, 1981 and the RCRA permit application was withdrawn. Borden submitted a plan to the USEPA in April 1982 (Attachment G) detailing closure activities that were conducted from May 1981 to May 1982. Twenty-four raw material/product storage tanks which remained after Cities had sold and vacated the property were located on the second floor of the operating portion of the plant. Four of these tanks were utilized by Borden for storage of resin material. Borden drained, rinsed and removed all of the tanks. The six 1,000-gallon processing tanks were rinsed, emptied and dismantled. The rinsate/residue (approximately 500 gallons) from all of the tanks was disposed of as hazardous waste. All equipment was dismantled and shipped to Borden's other plants. The excess equipment was either sold or scrapped. Raw materials that had not been used were shipped to one of the several plants that manufacture the products previously made at the Camden operation.

A total of 734 55-gallon drums of hazardous waste were removed during closure. The wastes were removed in May 1981 and consisted of printing inks and varnish wastes. Heavy metal analysis of the ink wastes revealed lead (up to 320,000 parts per million (ppm)), copper (up to 2,700 ppm), hexavalent chromium (up to 80,000 ppm) and cyanide (up to 136,000 ppm).

Two underground fuel oil tanks, which were utilized by Borden, remain on site. The capacities of these tanks are 5,000 gallons and 43,000 gallons. These are regulated tanks but are not registered with the Bureau of Underground Storage Tanks.

GROUNDWATER ROUTE

The site is underlain by the Potomac-Raritan-Magothy (PRM) Formation. The PRM Formation is of early to late Cretaceous age and overlies crystalline bedrock which is approximately 200 feet deep. The PRM Aquifer system consists of aquifers composed of sand and gravel and confining units of silt and clay. Three major aquifers have been defined within the aquifer system: the upper, middle and lower aquifers. The hydrogeology is extremely complex with several clay layers exhibiting discontinuities throughout the upper and middle PRM system. The upper aquifer is approximately 30 feet below the site. Originally, the natural groundwater flow was northerly, towards the Delaware River; however, increased pumpage in the PRM has reversed the groundwater direction towards the pumping centers and the Delaware River is now a recharge boundary.

Municipal wells within a 4-mile radius of the site include the City of

Camden which services 50,000, Gloucester City which services 13,500, Merchantville-Pennsauken which services 50,000, the New Jersey American Water Company which services 38,000, Collinswood which services 21,000, and Haddon Township which services 12,000 residents. There are approximately seven industrial wells within 1.0 mile and approximately 30 industrial wells within 5.0 miles of the site. All of the above mentioned wells tap the Raritan and Magothy Formations and range in depth from 118 feet to 487 feet. There are no private wells in the area.

There is regional groundwater contamination in the Camden area; however, it is unknown if Borden has contributed to this condition. There are no monitoring wells on site.

The facility never applied for a NJPDES permit.

SURFACE WATER ROUTE

The Cooper River lies approximately 500 feet to the west and flows into the Delaware River approximately 0.75 mile northwest of the site. The Cooper and Delaware Rivers are used for recreational and industrial purposes. There are no surface water intakes downstream of the Cooper River and there is no direct surface water migration route from the site to the river because of the relatively level topography.

AIR ROUTE

Borden maintained 16 air permits with the NJDEP/Division of Environmental Quality for boilers, exhaust fans and a modular baghouse under plant ID 50145. There were no reports of air violations from any of these units.

Because of the nature of the current operations on site, there is no potential for an air release to occur.

SOIL

The soils in this area of Camden belong to the Downer-Woodstown-Dragston association which consist mostly of sand and gravel deposited by streams and rivers. The soils are typically dark grayish-brown, well drained and have a high water table.

A RCRA inspection in March 1981 reported leaking drums in the drum storage area. This area has a concrete pad as a base with no secondary containment. The area surrounding the pad is paved except for a narrow strip of soil along the building. No readings above background were noted in this area or along the exterior of the facility during a Pre-Sampling Assessment conducted by the NJDEP/Division of Responsible Party Site Remediation/Bureau of Site Assessment on November 27, 1991. Several areas of solid waste dumping along with used oil filters and several 5-gallon open buckets of oil were noted in the rear of the facility. No soil sampling has been conducted at the site.

DIRECT CONTACT

The site is completely surrounded by a fence which would discourage entrance to the site after hours and no waste remains on site; therefore, there is no potential for direct contact.

FIRE AND EXPLOSION

There is no evidence of hazardous waste present on site which could

cause a fire or explosion. The open buckets of oil noted could potentially cause complications during a fire.

ADDITIONAL CONSIDERATIONS

Because the site lies in an urban area, there is no potential for damage to the flora, fauna and off-site property which could be attributed to the site.

ENFORCEMENT ACTIONS

Borden was issued a Complaint, Compliance Order and Notice of Opportunity for Hearing by the USEPA, Region II on January 15, 1982. The complaint cited Borden for failing to submit a written closure plan.

On January 18, 1983 the USEPA issued a Consent Agreement and Final Compliance Order. The Consent Agreement was also related to Borden's failure to submit the closure plan.

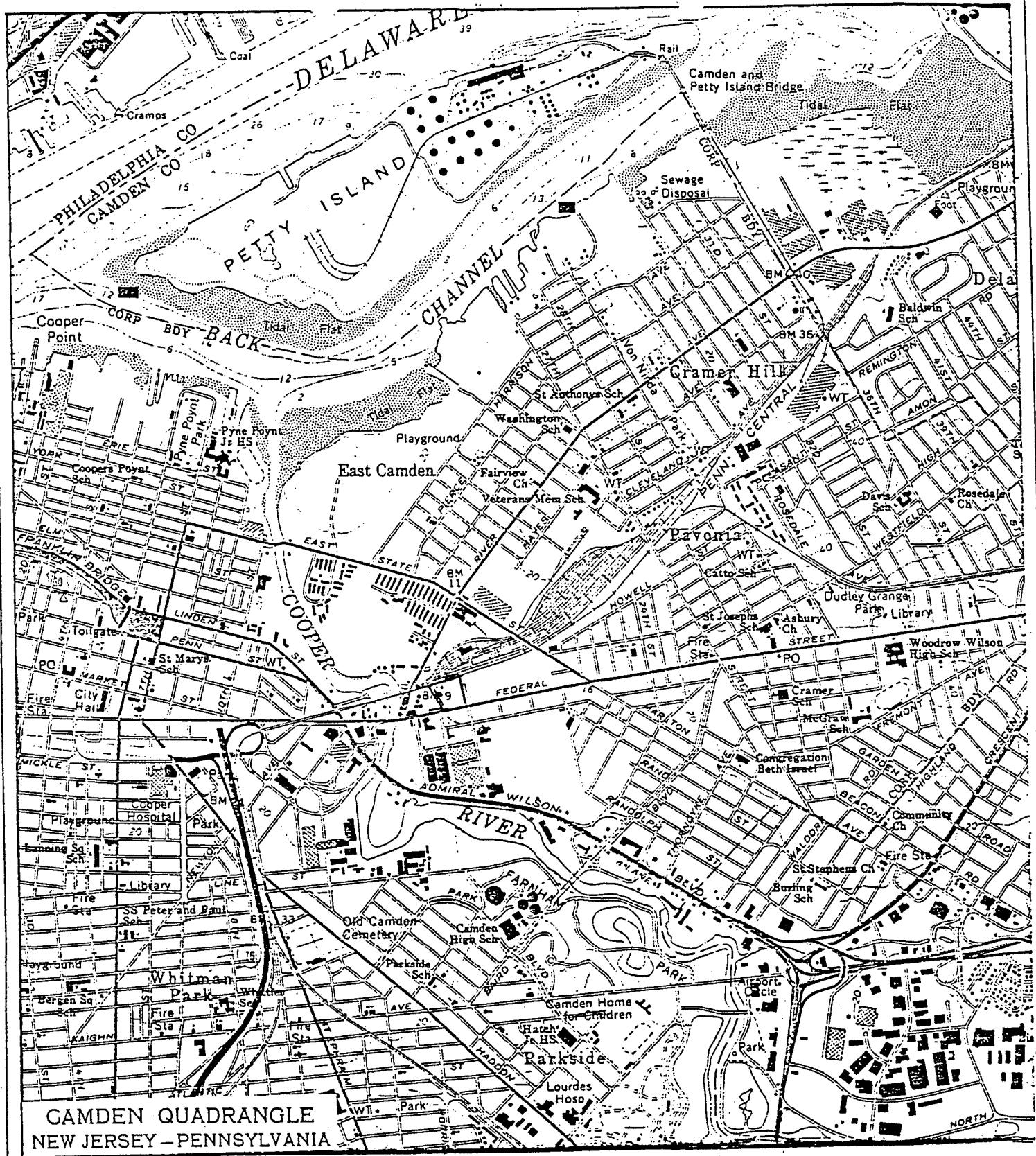
RECOMMENDATIONS

Based on information obtained on the Pre-Sampling Assessment conducted by the Bureau of Site Assessment in November 1991, no further action under CERCIA is warranted for the site. The case will be referred to the Bureau of Southern Field Operations to investigate the miscellaneous dumping in the rear of the facility. The case will also be referred to the Bureau of Underground Storage Tanks to ascertain the status of the underground storage tanks located on the property.

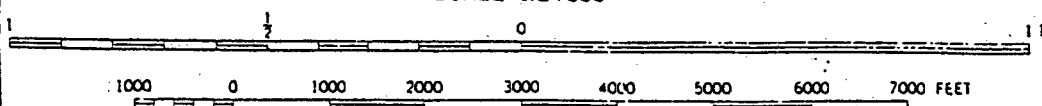
Submitted by

Frank Sorce
Bureau of Site Assessment
HSMS III
December 3, 1991

MAPS



SCALE 1:24 000



CONIQUE INTERVAL. 20 FEET.

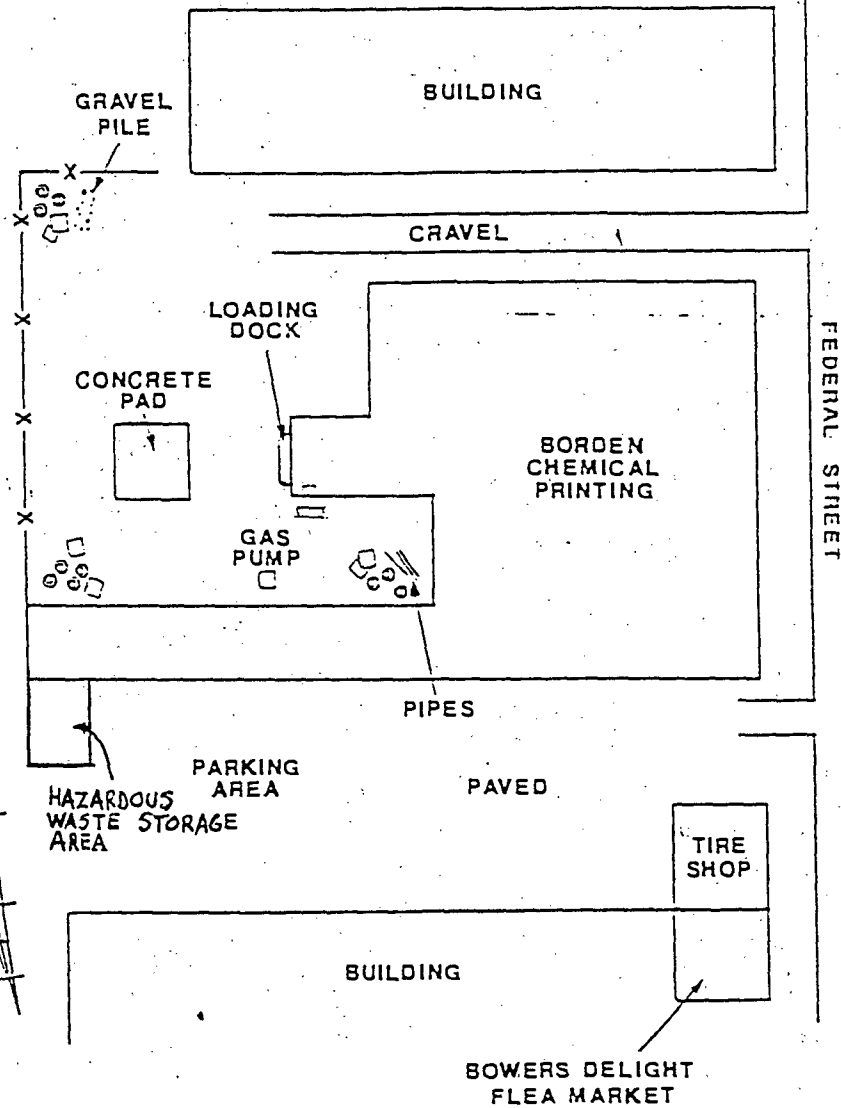
BORDEN CHEMICAL PRINTING
1625 FEDERAL STREET
CAMDEN, CAMDEN COUNTY
LAT 39° 56' 43"
LONG 75° 56' 06"
USGS QUADRANGLE MAP
MAP 1



LEGEND

- PALLETS
- TIRES

RAILROAD



SITE MAP

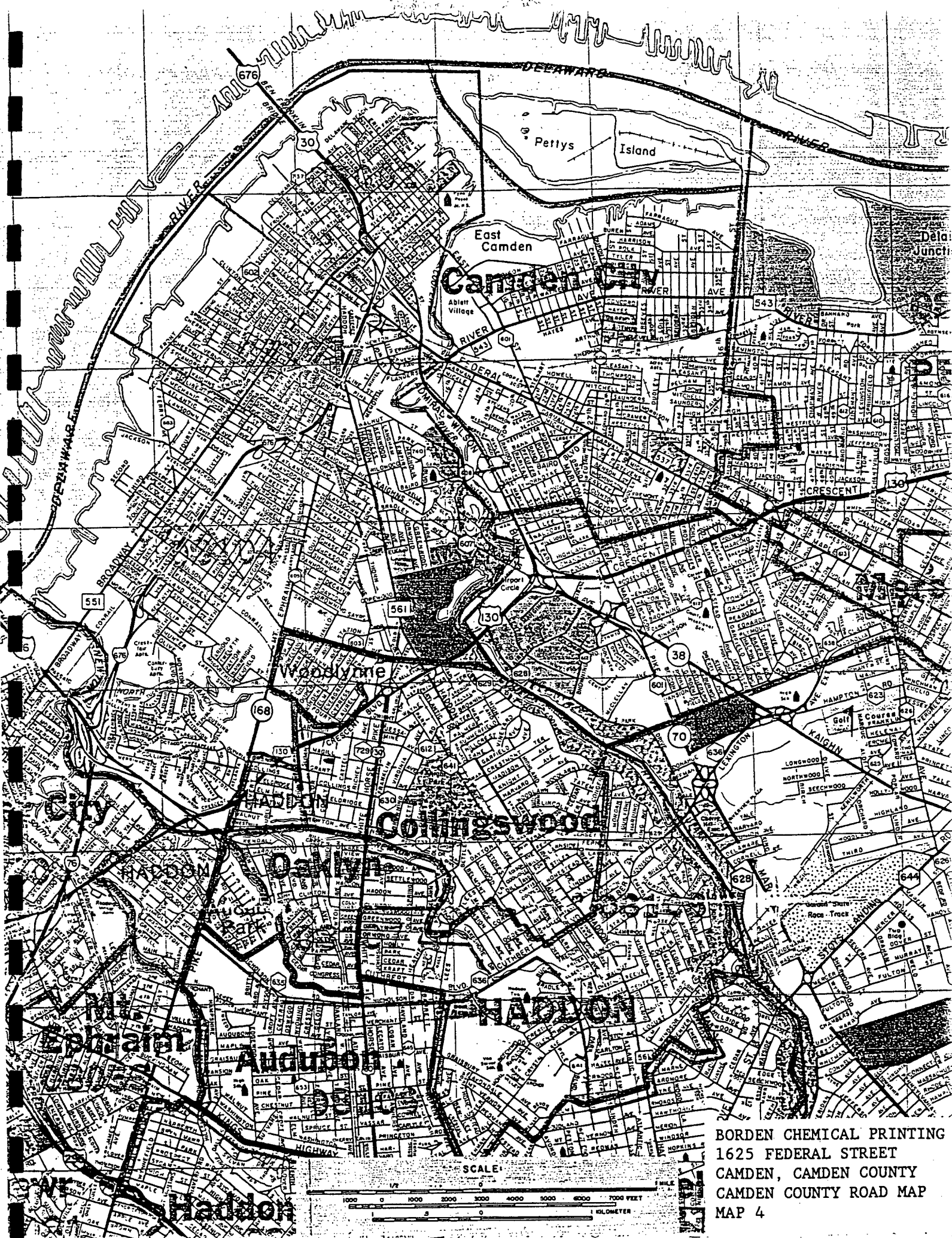
BORDEN CHEMICAL PRINTING. CAMDEN. N.J.

NOT TO SCALE

BORDEN CHEMICAL PRINTING
1625 FEDERAL STREET
CAMDEN, CAMDEN COUNTY
SITE MAP
MAP2

[illegible]

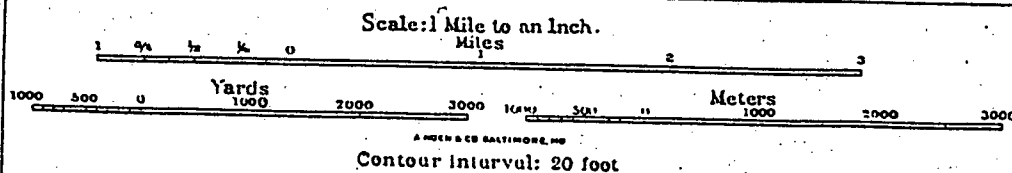
BORDEN CHEMICAL PRINTING
1625 FEDERAL STREET
CAMDEN, CAMDEN COUNTY
CAMDEN TAX MAP
MAP 3



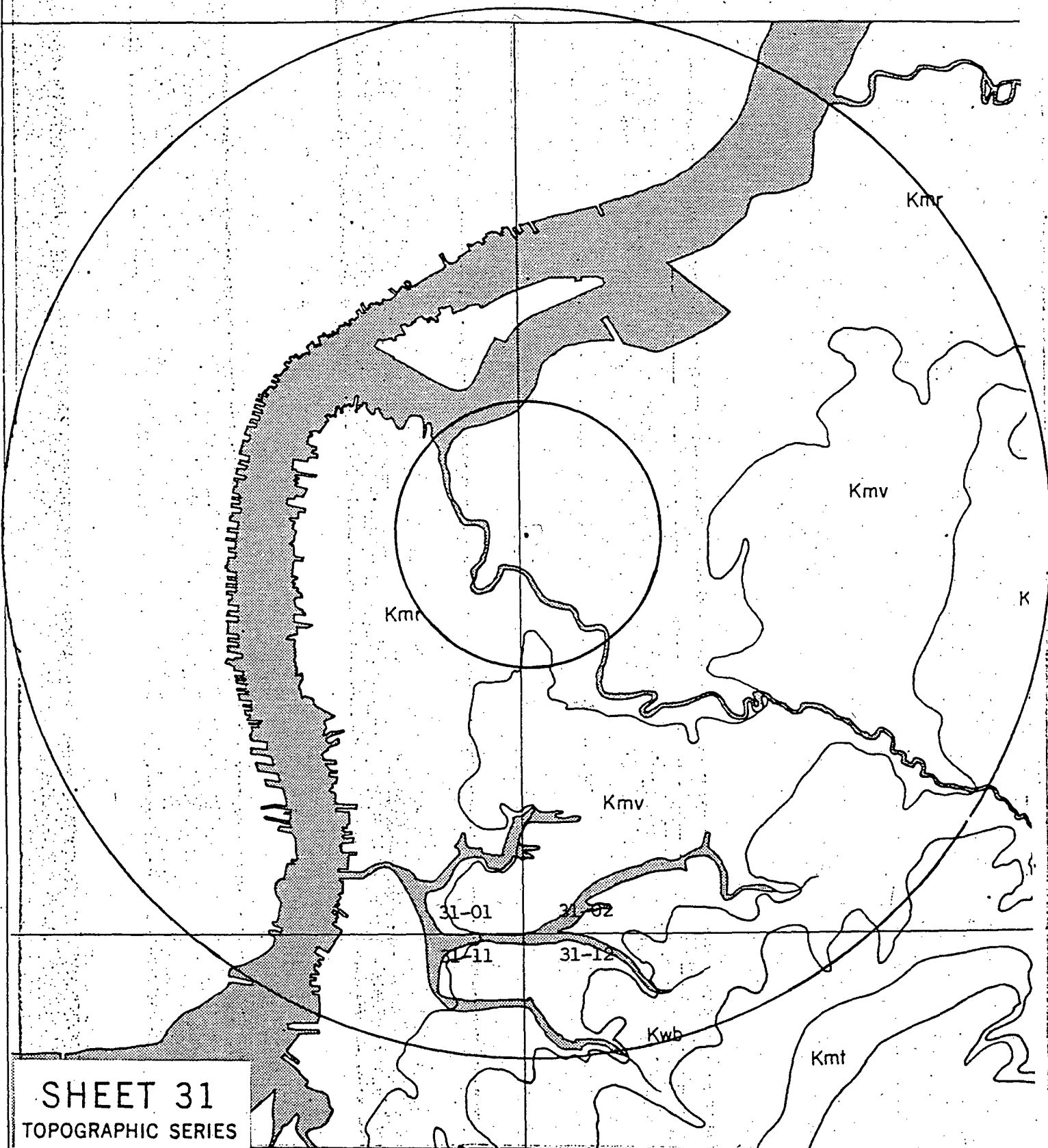
BORDEN CHEMICAL PRINTING
1625 FEDERAL STREET
CAMDEN, CAMDEN COUNTY
CAMDEN COUNTY ROAD MAP
MAP 4



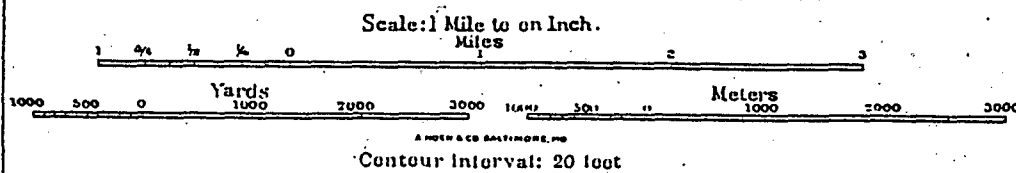
SHEET 31
TOPOGRAPHIC SERIES



BORDEN CHEMICAL PRINTING
1625 FEDERAL STREET
CAMDEN, CAMDEN COUNTY
NEW JERSEY ATLAS BASE
MAP-SHEET 31
MAP 5



SHEET 31 TOPOGRAPHIC SERIES



BORDEN CHEMICAL PRINTING
1625 FEDERAL STREET
CAMDEN, CAMDEN COUNTY
NEW JERSEY ATLAS GEOLOGIC
OVERLAY-SHEET 31
MAP 6

- △ — INDUSTRIAL WELL YIELD OVER 70 GALLONS PER MINUTE (INCLUDING PRIVATE WELLS)
- — PUBLIC SUPPLY WELL YIELDING OVER 70 GALLONS PER MINUTE
- ⊕ — UNSUCCESSFUL ROCK WELL YIELDING LESS THAN 70 GALLONS PER MINUTE
- ⊙ — UNSUCCESSFUL SAND WELL YIELDING LESS THAN 70 GALLONS PER MINUTE
- † — NO TEST — NO DATA ON YIELD

--- FAULT (DASHED WHERE INFERRED)

--- CONTACT (DASHED WHERE INFERRED)

--- PHYSIOGRAPHIC PROVINCE BOUNDARY

--- WATER SUPPLY TRANSMISSION LINE

NOTE: WHERE THE PRECAUBRIAN FORMATION BOUNDARIES TERMINATE ABRUPTLY, IT IS THE GEOLOGIST'S OPINION THAT THE GEOLOGICAL COMPLEXITY OF THE AREA PREVENTS FURTHER INTERPRETATIONS.

Kmr — CRETACEOUS MAGOTHY AND RARITAN FORMATIONS (SAND AND CLAY)

Tb — TRIASSIC BRUNSWICK FORMATION

Tc — TRIASSIC CONGLOMERATE BEDS OF THE STOCKTON FORMATION

Tl — TRIASSIC LOCKATONG FORMATION

Tdb — TRIASSIC DIABASE

Tbs — TRIASSIC BASALT FLOWS

Sd — SILURIAN DECKER LIMESTONE AND LONGWOOD SHALE FORMATIONS

Sgp — SILURIAN GREEN POND CONGLOMERATE

Omb — ORDOVICIAN MARTINSBURG SHALE

Eok — CAMBRO ORDOVICIAN KITTATINNY LIMESTONE

Ch — CAMBRIAN HAROYSTON SANDSTONE

PRECAMBRIAN:

gh — HORNBLende GRANITE WITH PYROXENE GRANITE

ga — ALASKITE

am — AMPHIBOLITE

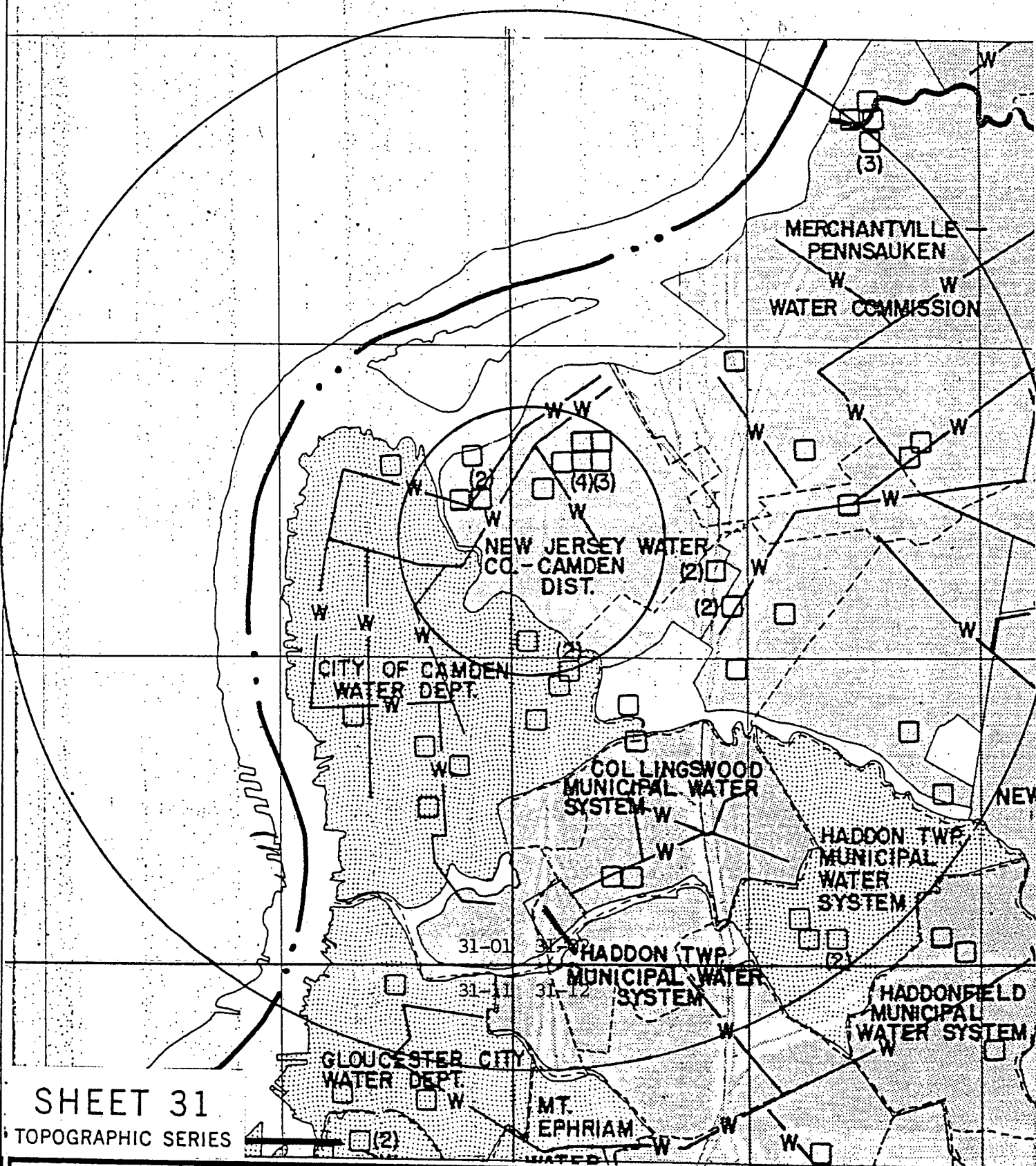
px — PYROXENE GNEISS

gnq — QUARTZ PLAGIOCLASE GNEISS

gnb — BIOTITE GNEISS

sk — SKARN, GRAPHITE SCHIST

Ind — FORMATION NOT DETERMINED



MERCHANTVILLE
 PENNSAUKEN
 W W
 WATER COMMISSION

NEW JERSEY WATER
CO. - CAMDEN (2)
DIST.

CITY OF CAMDEN
WATER DEPT.

COL LINGSWOOD
MUNICIPAL WATER
SYSTEM

**HADDOON TWP
MUNICIPAL
WATER
SYSTEM**

HADDON TWP.
MUNICIPAL WATER
SYSTEM

**HADDONFIELD
MUNICIPAL
WATER SYSTEM**

GLOUCESTER CITY
WATER DEPT.

MT.
EPHRIAM

BORDEN CHEMICAL PRINTING
1625 FEDERAL STREET
CAMDEN, CAMDEN COUNTY
NEW JERSEY ATLAS WATER
SUPPLY OVERLAY-SHEET 31
MAP 7

LEGEND

WATER SUPPLY



AREA SERVED BY PRIVATE WATER SERVICE COMPANIES



AREA SERVED BY REGIONALLY OWNED WATER SERVICE COMPANIES



AREA SERVED BY MUNICIPALLY OWNED WATER SERVICE COMPANIES



AREA NOT PRESENTLY SERVED BY WATER SERVICE



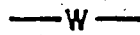
PUBLIC SUPPLY WELLS



WATER MAIN ACROSS HIGHWAY
FOR FUTURE USE



SURFACE WATER INTAKE



MAJOR WATER MAINS

SEWAGE, LANDFILL



AREA SERVED BY PUBLIC SEWAGE SERVICE



AREA NOT PRESENTLY SERVED BY SEWAGE SERVICE



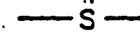
SANITARY LANDFILLS



SEWAGE TREATMENT PLANTS (CAPACITY < 0.3mgd)



SEWAGE TREATMENT PLANTS (CAPACITY ≥ 0.3mgd)



MAJOR SEWAGE TRANSMISSION LINES

DRAINAGE BASIN



DRAINAGE BASIN BOUNDARY



RIVER BASIN BOUNDARY



DRAINAGE BASIN NAME



STREAMS AND RIVERS

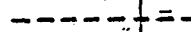


FLOOD PRONE AREAS

POPULATION



COUNTY BOUNDARY



MUNICIPAL BOUNDARY



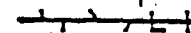
POPULATION DENSITY IN PERSONS PER SQUARE MILE



AREA IN SQUARE MILES



PERCENT AREA OF MUNICIPALITY ON BLOCK



MARKET ROADS



BUILT UP AREAS



STATE BOUNDARY

A. Camden, Philadelphia

B. Delaware River-Newtoa Creek, Coopers Creek

C. 2. Map No.	Location	Period of Record
449	Cooper River at Camden	1967-

3.	335 Newton Creek, North Branch, Woodlyne	1965
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D. Magothy and Paritan Formations (Kmr), Merchantville Clay (Kmr)

E. 1. Physiographic Province: Coastal Plain

Subdivision: Inner Plain

Major Topographic Features: Delaware River, Clay and Marl Region

Elevations (ft. above sea level): hills 45, valleys 0

Relief (ft.): 45

2. a. Normal Year: 43"

Dry Year: 35"

Wet Year: 48"

b. January: 33°F

July: 76°F

c. 250 days. Last killing frost: 4/15; first killing frost: 11/5

G. Corps of Engineers (U.S. Army) - Petty Island

H. Camden:

Walt Whitman House

Benjamin Cooper House

Joseph Cooper House

Pomona Hall

Taylor House

Newton Friends Meeting House

Charles S. Boyer Memorial Hall

I. Water Well Records

<u>Location</u>	<u>Owner</u>	<u>Year Drilled</u>	<u>Screen Setting or Depth of Casing</u>	<u>Total Depth</u>	<u>g/m Yield</u>	<u>Formation</u>
• 31-01-652	City of Camden, #5	1963	134-169	171	1000	Kmr
• 31-01-655	H. Kohnstamm & Co., Inc.	1954	116-136	136	150	"
• 31-01-656	U.S. Gasker, #1	1953	130-141	153	100	"
• 31-01-657	Savar Amusement Corp.	1950	82-113	113	500*	Kr
• 31-01-657	Stanley Corp. of America	1949	118-138	150	200*	"
• 31-01-662	City of Camden, #15	1954	116-136	155	1000	"
• 31-01-664	Camden Water Dept., #1-A	1953	153-170	175	1000	"
• 31-01-665	City of Camden, Test Well #1	1950	129-150	166	300	"
• 31-01-665	" #14	1953	105-145	164	1000	"
• 31-01-667	Sungil Co.	1947	147-157	157	100	"
• 31-01-669	Paris Produce Co.	1964	150-166	167	100	Kmr
• 31-01-673	Lintonia Pure Food Shop, Inc.	1950	102-123	128	315*	"
• 31-01-681	Savar Amusement Corp., #2	1950	110-130	130	500*	Kr
• 31-01-681	Camden Trust Co.	1949	93-123	127	430*	"
• 31-01-684	Stanley Corp. of America	1949	110-130	152	600*	"
• 31-01-687	Savar Amusement Corp.	1949	114-134	138	600	"
• 31-01-691	Baltimore Markets, #2	1950	138-170	170	1200*	"
• 31-01-912	Public Service Elec. & Gas Co.	1950	120-146	149	600	"
• 31-01-912	"	1954	113-145	145	350	"
• 31-01-916	City of Camden, #2-B	1953	111-136	204	1000	"
• 31-01-921	Stanley Corp. of America	1949	86-150	163	250*	"
• 31-01-928	Samuel Adelson	1952	92-102	102	200	"
• 31-01-929	Camden Water Dept.	1948	111-136	165	1012	"
• 31-01-934	Liberty Theatre #1	1949	112-130	130	150	"
• 31-01-943	MacAndrews & Forbes Co.	1951	82-103	114	350	"
• 31-01-956	Camden Water Dept., #7	1966	123-163	167	1023	"
• 31-01-961	City of Camden, #11	1942	124-154	166	1005	"

*Indicates use as a recharge well.

J. Geodetic Control Survey monuments described in
Index Map 48; Adjacent Index Maps 44, 54

- A. Camden
- B. Delaware River-Baldwin Run, Coopers Run, Newton Creek, Pennsauken
- C. 1. Charry Hill - Non-recording temperature and precipitation gauges

2. Map No.	Location	Period of Record
194	South Branch Pennsauken Creek at Cherry Hill	1967-
196	Cooper River at Haddonfield	1963-
447	North Branch Cooper River at Marlton	1964-
443	North Branch Cooper River at Ellisburg	1964-
449	Cooper River at Camden	1964-
450	Newton Creek at Collingswood	1964-
3. 196	Cooper River at Haddonfield	1965-
334	Newton Creek at West Collingswood	
335	North Branch Newton Creek at Woodlyne	

Water Quality Standards: (explained in Atlas Sheet description) FW3, TW2

- D. Mount Laurel and Wenonah Sands (Krw), Marshalltown Formation (Kmt), Englishtown Sand (Ket), Woodbury Clay (Kwb), Merchantville Clay (Kmv), Magothy and Raritan Formations (Kmr)

- E. 1. Physiographic Province: Coastal Plain

Subdivision: Inner Plain

Major Topographic Features: Delaware River, Clay and Marl Region

Elevations (ft. above sea level): hills 100, valleys 0

Relief (ft.): 100

2. a. Normal Year: 43"
Dry Year: 36"
Wet Year: 48"

- b. January: 33°F
July: 76°F

- c. 249 days. Last killing frost: 4/15; first killing frost: 10/30

- F. Camden County:
Cooper River Park

- G. Corps of Engineers (U.S. Army) - Petty Island

- H. Griffin Morgan House, Pennsauken
1743 Samuel Cole House, Cherry Hill

I. Water Well Records

Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Fe
● 31-02-195	Paragon Oil Co., #1	1961	51-61	61	100	Kr
● 31-02-225	City of Camden, #4-A	1960	95-130	134	1585	"
● 31-02-227	" #5-NA	1960	79-114	121	1522	"
● 31-02-228	" #3	1953	73-107	136	1000	"
● 31-02-228	" #8	1953	89-124	141	1000	"
● 31-02-228	" #10	1960	75-115	118	1529	"
31-02-235	Kingston Trap Rock	1955	55-65	63	125	"
31-02-238	" #2	1966	115-123	127	200	"
31-02-238	Atlantic Blue Diamond Corp.	1958	100-110	110	180	"
31-02-281	City of Camden	1975	140-180	190	1200	"
31-02-293	Meadow Brook Swim Club	1963	97-107	107	200	"
31-02-297	H&H Industries	1959	71-81	81	100	"
31-02-331	Riverton-Palmyra Water Co. #16	1965	144-176	192	1034	"
31-02-331	" #13	1963	166-197	206	610	"
31-02-361	Delaware Valley Water Co., #28	1969	225-260	264	1200	"
31-02-363	" #31	1970	215-261	267	1002	"
● 31-02-419	New Jersey Water Co., #50	1958	139-170	176	1000	"
● 31-02-427	" #25	1961	305-367	399	1050	"
● 31-02-433	Merchantville-Pennsauken Water Co.	1968	109-139	139	882	"
● 31-02-442	City of Camden, Test #6	1954	153-175	181	210	Kr
● 31-02-443	New Jersey Water Co., #44	1950	154-186	187	1400	Kr
● 31-02-443	" #45	1950	141-173	173	955	"
● 31-02-443	" #46	1950	148-178	179	1400	"
● 31-02-443	" #48	1954	122-164	171	1412	"
● 31-02-444	City of Camden, #16	1954	149-179	181	1000	"
● 31-02-449	Savar Amusement Corp.	1949	169-189	189	450	"
● 31-02-451	H. Kohnstamm & Co., Inc., #5-A	1967	163-184	194	200	"
● 31-02-451	"	1959	133-158	158	250	"
● 31-02-451	New Jersey Water Co., #52	1965	147-198	198	1404	"
● 31-02-451	" #38	1933	126-162	166	846	"
● 31-02-451	" #47	1953	159-175	177	1012	"
● 31-02-462	Parks Dairies	1958	154-170	172	200	"
● 31-02-477	Camden Co. Park Commission	1950	186-217	217	1200	"
● 31-02-492	Merchantville-Pennsauken Water Comm., #9	1956	107-137	141	875	"
● 31-02-492	" #10	1963	223-258	262	1000	"
● 31-02-496	" #2-A	1965	110-140	143	900	"
● 31-02-496	" #1-R	1971	132-152	159	875	"
● 31-02-519	" Test Well	1963	118-138	160	400	"
● 31-02-537	" Test Well #1	1956	247-268	293	317	"
● 31-02-554	" #2	1962	245-285	300	1040	"
● 31-02-561	" #6	1957	242-277	283	1020	"
● 31-02-575	Camden Co. Board of Ed.	1967	322-401	401	320	"
31-02-621	Merchantville-Pennsauken Water Comm., #7	1958	240-275	330	1000	"
31-02-692	" #8	1950	207-237	240	875	"
31-02-694	New Jersey Water Co., #22	1960	371-453	497	1067	"
31-02-697	" #24	1961	112-167	186	1051	"
31-02-699	"	1967	376-427	430	1030	"

• 31-02-712	City of Camden, Test #5	1953	205-225	277	280	Kmr
• 31-02-712	"	1953	185-225	243	1000	"
• 31-02-712	" #17	1954	230-265	274	1000	"
• 31-02-714	"	1953	90-115	123	1000	"
• 31-02-716	Our Lady of Lourdes Hospital	1963	237-257	261	275	"
• 31-02-718	A. N. Stoll Werck, Inc.	1950	111-131	136	210	"
• 31-02-725	Boro. of Collingswood, #3-R	1960	257-287	294	1000	Kr
• 31-02-728	" #2-B	1960	248-278	308	1000	Kmr
• 31-02-754	Friendship Dairy, #1	1955	143-164	164	100	"
• 31-02-773	Boro. of Collingswood Test #1	1964	307-333	370	-	"
• 31-02-774	A.M. Ellis Theatres, Inc., #3	1961	83-103	115	250*	"
• 31-02-781	Boro. of Collingswood, "B"	1965	224-313	336	1034	"
• 31-02-782	" "A"	1965	219-312	331	1034	"
• 31-02-837	New Jersey National Guard	1956	96-111	111	150	"
• 31-02-857	Morgan Brothers, Inc.	1967	431-451	451	302	"
• 31-02-865	Joe's Trailer Camp	1955	112-122	122	70	"
• 31-02-879	Twp. of Haddon, #4	1965	417-448	455	1000	"
• 31-02-879	" #3	1956	432-469	490	800	"
• 31-02-887	" Bd. of Ed., #1	1966	142-162	165	200	"
• 31-02-887	" New #1	1968	401-479	481	870	"
31-02-898	Boro. of Haddonfield, Test #1	1965	490-510	510	350	"
31-02-899	"	1967	307-372	380	1029	"
31-02-982	New Jersey Water Co., #23	1960	321-378	405	1001	"
31-02-982	" #13	1953	491-527	527	1200	"
31-02-986	Hunt Tratt Swimming Club	1957	232-243	243	90	"

*Indicates use as a recharge well.

J. Geodetic Control Survey monuments described in
Index Map 48; Adjacent Index Maps 44, 49, 54, 55

• WELLS WITHIN A 4-MILE RADIUS OF THE SITE

A. Camden, Philadelphia, Runnemede, Woodbury

B. Delaware River-Big Timber Creek, Mantua Creek, Newton Creek, Woodbury Creek

C. 3. Map No.	Location	Period of Record
333	Woodbury Creek at Woodbury	1965-

Water Quality Standards: (explained in Atlas Sheet description)
FW2, TW1 except where classified FW3

D. Kirkwood Sand (TkW), Hornerstown Marl (ThT), Navesink Marl (Kns),
Mount Laurel and Wenonah Sands (Kmw), Marshalltown Formation (Kmt),
Englishtown Sand (Ket), Woodbury Clay (Kwb), Merchantville Clay (Kmv),
Magothy and Raritan Formations (Kmr)

E. 1. Physiographic Province: Coastal Plain

Subdivision: Inner Plain

Major Topographic Features: Delaware River, Clay and Marl Region

Elevations (ft. above sea level): hills 100, valleys 0

Relief (ft.): 100

2. a. Normal Year: 44"

Dry Year: 34"

Wet Year: 51"

b. January: 33°F

July: 76°F

c. 250 days. Last killing frost: 4/20; first killing frost: 10/30

H. Red Bank Battlefield, National Park

James Whitall House, National Park

Woodbury Friends Meeting House, Woodbury

I. Water Well Records

<u>Location</u>	<u>Owner</u>	<u>Year Drilled</u>	<u>Screen Setting or Depth of Casing</u>	<u>Total Depth</u>	<u>g/ Yie</u>
31-11-319	Atlantic Ice Mfg. Co.	1962	205-240	242	20
31-11-322	City of Gloucester	1965	225-265	270	103
31-11-343	"	1961	221-261	280	100
31-11-343	New Jersey Zinc Co.	1953	223-253	275	60
31-11-343	"	1958	249-279	285	60
31-11-348	Borough of Brooklawn	1961	307-327	327	40
31-11-349	"	1961	101-141	152	22
31-11-349	"	1927	114-157	165	22
31-11-353	City of Gloucester	1958	161-185	188	50
31-11-373	Borough of Brooklawn	1969	288-321	324	App. 3
31-11-378	Borough of Westville	1957	286-313	323	120
31-11-382	Borough of Bellmawr	1956	334-359	423	80
31-11-422	Borough of National Park	1950	-	87	17
31-11-422	"	1956	241-282	307	63
31-11-448	West Deptford Little League	1953	62-72	72	10
31-11-497	Polyrez Co.	1959	134-166	166	50
31-11-514	Texaco Co.	1973	266-306	329	100
31-11-515	Twp. of West Deptford	1961	307-353	363	75
31-11-565	General Engines Co.	1954	38-43	43	10
31-11-612	Steinberger	1959	-	170	-
31-11-628	Deptford Twp.	1971	282-361	361	75
31-11-659	John G. Baletar	1960	-	200	-
31-11-671	Child Care Center	1967	216-236	294	10
31-11-678	Woodbury Asso. Market Co.	1966	201-221	221	40
31-11-744	Colonial Pipeline Co.	1963	127-137	137	15
31-11-751	Twp. of West Deptford	1973	388-345	480	101
31-11-754	"	1972	392-412	412	15
31-11-759	Greenfield Water Co.	1963	241-288	336	60
31-11-818	Lynn Const. Co.	1959	158-169	172	10
31-11-822	City of Woodbury	1960	405-457	462	101
31-11-824	John Johanson	1953	-	148	-
31-11-857	Deptford Twp. Mun. Util. Auth.	1956	252-273	400	50
31-11-913	Albert Bbginsky	1958	-	152	-

J. Geodetic Control Survey monuments described in Index Maps 48,54

A. Camden, Runnemede

B. Delaware River-Big Timber Creek, Coopers Creek, Newton Creek

C. 1. Audubon - Non-recording temperature and precipitation gauges

2. Map No.	Location	Period of Record
446	Cooper River at Kirkwood	1964-
447	North Branch Cooper River near Marlton	1964-
451	South Branch Newton Creek at Haddon Heights	1964-
452	South Branch Big Timber Creek at Blackwood	1964-
3.	334 Newton Creek at West Collingswood	1965-
	336 South Branch Newton Creek at Mt. Ephraim	1965-
	337 Big Timber Creek at Chews Landing	1965-
	338 South Branch Big Timber Creek at Blackwood	1965-

Water Quality Standards: (explained in Atlas Sheet description) FW3

D. Kirkwood Sand (TkW), Vincentown Sand (Tvt), Hornerstown Marl (Tht), Navesink Marl (Kns), Mount Laurel and Wenonah Sands (Kmw), Marshalltown Formation (Kmt), Englishtown Sand (Ket), Woodbury Clay (Kwb), Merchantville Formation (Kmr), Magothy and Raritan Formation (Kmr)

E. 1. Physiographic Province: Coastal Plain
 Subdivision: Inner Plain, Outer Plain
 Major Topographic Features: Clay and Marl Region, Pine Plains
 Elevations (ft. above sea level): hills 140, valleys 0
 Relief (ft.): 140

2. a. Normal Year: 44"
 Dry Year: 35"
 Wet Year: 51"

b. January: 33°F
 July: 76°F

c. 249 days. Last killing frost: 4/20; first killing frost: 10/30

H. Whitman-Stafford House, Lindenwold (State owned)
 Indian King Tavern, Haddonfield
 Haddon Fortnightly, Haddonfield
 Benjamin Clark House, Deptford

I. Water Well Records

<u>Location</u>	<u>Owner</u>	<u>Year Drilled</u>	<u>Screen Setting or Depth of Casing</u>	<u>Total Depth</u>	<u>g/m Yield</u>	<u>Formation</u>
31-12-135	Imperial Gold & Silver Kid Co.	1948	140-170	170	250	Kmr
31-12-156	New Jersey Zinc Co., #18	1958	144-191	201	708	"
31-12-157	" #33	1967	422-484	500	850	"
31-12-222	Green Valley Farms	1965	195-215	227	151	"
31-12-232	Haddon Ice & Coal Co.	1957	190-221	225	360	"
31-12-249	N. J. Water Co., #14	1954	506-598	606	1018	"
31-12-272	" #34	1967	288-377	390	1050	"
31-12-273	" #30	1965	224-275	279	811	"
31-12-281	" #15	1956	455-597	634	1100	"
31-12-281	" #1	1968	480-490	517	133	"
31-12-317	Borough of Haddonfield, #2	1956	206-246	254	1001	"
31-12-355	Tavistock Country Club	1968	219-246	246	300	"
31-12-414	Borough of Bellmawr	1966	380-557	580	1016	"
31-12-417	Miller International Co.	1963	250-260	263	150	"
31-12-428	Trap Rock Industries	1963	195-221	350	254	Ket
31-12-465	N. J. Water Co., #19	1958	297-339	340	1900	Kmr
31-12-499	RCA	1964	180-190	212	125	Ket
31-12-523	Weyerhaeuser Corp.	1969	243-273	285	243	Kmr
31-12-525	Owens-Corning Fiberglass Co., #2 Test	1964	563-618	685	900	"
31-12-526	#1 Test	1964	107-137	140	170	Ket
31-12-526	#3 Test	1964	-	515	500	Kmr
31-12-534	#1	1956	285-315	502	1045	"
31-12-534	#2	1946	290-320	344	1000	"
31-12-534	Laurel Springs Water Co.	1964	428-510	524	710	"
31-12-572	N. J. Water Co., #29	1965	612-712	722	1050	Kr
31-12-584	Owens-Corning Fiberglass Co.	1957	-	306	100	Kmr
31-12-646	Tracy Val Inc.	1972	294-303	303	100	"
31-12-652	Abbotts Dairies Inc.	1960	354-375	447	200	"
31-12-658	Laurel Springs Water Co.	1956	398-441	500	709	Kr
31-12-786	Gloucester Twp. Mun. Util. Auth.	1971	334-359	359	75	Kmr
31-12-938	Laurel Springs Water Co., #13	1954	394-456	555	800	"
31-12-938	" #15	1964	395-473	481	650	"
31-12-974	Garden State Water Co., #1 Test	1970	457-467	514	75	"

J. Geodetic Control Survey monuments described in
Index Maps 48,54; adjacent Index Maps 49,55

LATITUDE 395643
LONGITUDE 750606

DRAFT

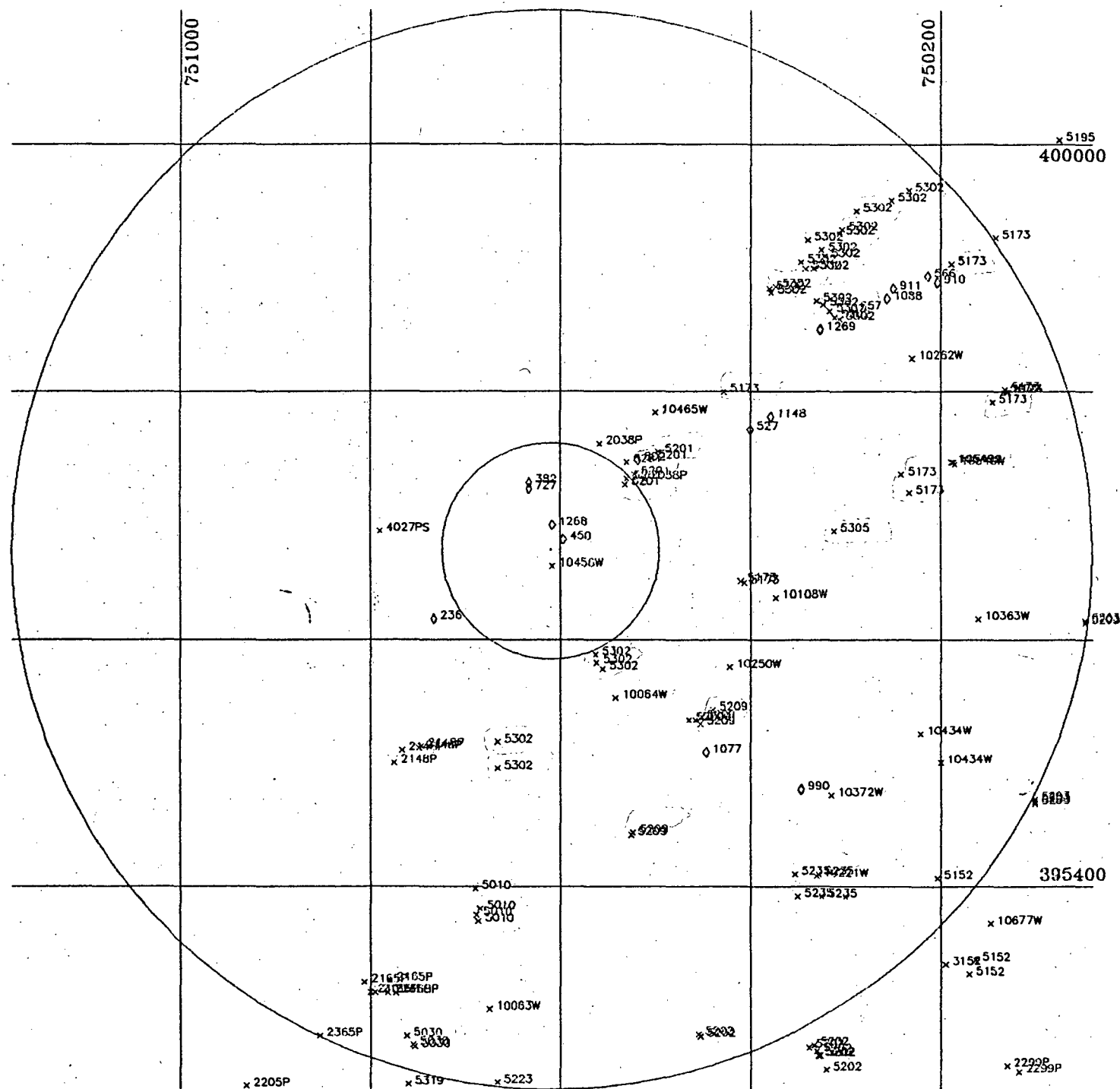
SCALE: 1:63,360
(1 Inch = 1 Mile)

x WATER WITHDRAWAL POINTS
 O NJGS CASE INDEX SITES
 1 MILE AND 5 MILE RADII INDICATED

NJGS CASE INDEX DATA RETRIEVED FROM:
NEW JERSEY GEOLOGICAL SURVEY
ON 12/22/87

ROGRAMS .
ALLOCATION
15

TO REVISION



SITE/LM	NAME	LAT	LON	DISTANCE	CONTAM	PHIDE1	PHIDE2	STATUS1	STATUS2
236	MINI'S AMOCO, CAMDEN CO.	395610	750720	1.3	51	103	2080	5	
392	CAMDEN MUNICIPAL WELLS, CAMDEN CITY, CAMDEN CO.	395716	750620	0.7	00	0102	2080	1	
727	HARRISON AVE. LANDFILL, CAMDEN, CAMDEN CO.	395713	750620	0.6	0	2080	0	9	
1268	ADVANCED CHEMICAL TECHNOLOGY, CAMDEN CITY, CAMDEN CO.	395655	750605	0.2	68	0102	2080	1	B
450	CONRAIL, PAVONIA YARD, CAMDEN, CAMDEN CO.	395648	750558	0.2	53	103	160	1	
802	LANGSTON DIV-MOLINS MACHINE CO., CAMDEN, CAMDEN CO.	395727	750611	1.2	00	2080		1	B.
1077	BOB'S EXTRA STATION, COLLINGSWOOD, CAMDEN CO.	395505	750428	2.4	51	2080	0	F	
527	SOL MODERN HARD CHROME SERVICE, PENNSAUKEN, CAMDEN CO.	395742	750400	2.2	39	2080	0	9	
I148	SHELL SERVICE STATION, RT 130 & EDWINS RD, PENNSAUKEN, CAMDEN CO.	395748	750347	2.4	51			3	
990	WESTMONT MOBIL, WESTMONT, CAMDEN CO.	395447	750328	3.2	0	0	0	3	
1269	ADVANCED PROCESS SUPPLY, PENNSAUKEN, CAMDEN CO.	395630	750316	3.2	00	2090		1	B
657	CAMDEN'S PUCKACK WELL FIELD, CAMDEN CO.	395840	750255	3.6	39	2080	0	1	
1068	GARDEN STATE MOTORS, PENNSAUKEN, CAMDEN CO.	395845	750234	3.9	53	2080	0	1	B
911	PENLAR ANODIZING, PENNSAUKEN, CAMDEN CO.	395550	750230	4.0	00	2080	0	1	C
566	SHORE OIL AND CHEMICAL, PENNSAUKEN, CAMDEN CO.	395656	750208	4.3	00	2080	0	1	E
910	MERCHANTVILLE/PENNSAUKEN WATER COMMISSION, PENNSAUKEN, CAMDEN CO.	395653	750202	4.3	00	0102	2080	1	C

Number of Observations: 16

SITE#	NAME	LAT	LONG	DISTANCE	COUNTY	FMCODE1	FMCODE2	STATUS1	STATUS2
236	MONK'S AMOCO, CAMDEN CO.	395610	750720	1.3	51	103	2060	3	
382	CAMDEN MUNICIPAL WELLS, CAMDEN CITY, CAMDEN CO.	395716	750620	0.7	00	0102	2080	1	
450	CONRAIL, PAVONIA YARD, CAMDEN, CAMDEN CO.	395648	750558	0.2	53	103	160	1	
527	SEL MODERN HARD CHROME SERVICE, PENNSAUKEN, CAMDEN CO.	395742	750400	2.2	39	2080	0	9	
566	SNOPE OIL AND CHEMICAL, PENNSAUKEN, CAMDEN CO.	395856	750208	4.3	00	2080	0	1	E
657	CAMDEN'S RUCKACK WELL FIELD, CAMDEN CO.	395840	750255	3.6	39	2080	0	1	
727	HARRISON AVE. LANDFILL, CAMDEN, CAMDEN CO.	395713	750620	0.6	0	2080	0	9	
802	LANGSTON DIV-MOLING MACHINE CO., CAMDEN, CAMDEN CO.	395727	750511	1.2	00	2080		1	B
910	MERCHANTVILLE/PENNSAUKEN WATER COMMISSION, PENNSAUKEN, CAMDEN CO.	395853	750202	4.3	00	0102	2080	1	C
911	PENLAR ANODIZING, PENNSAUKEN, CAMDEN CO.	395850	750230	4.0	00	2080	0	1	C
990	WESTMONT MOBIL, WESTMONT, CAMDEN CO.	395447	750329	3.2	0	0	0	3	
1077	BOE'S EXTRA STATION, COLLINGSWOOD, CAMDEN CO.	395505	750429	2.4	51	2080	0	F	
1088	GARDEN STATE MOTORS, PENNSAUKEN, CAMDEN CO.	395845	750234	3.9	53	2080	0	1	B
1163	SHELL SERVICE STATION, RT 130 & BOWING RD, PENNSAUKEN, CAMDEN CO.	395748	750347	2.4	51			3	
1268	ADVANCED CHEMICAL TECHNOLOGY, CAMDEN CITY, CAMDEN CO.	395635	750605	0.2	69	0102	2080	1	B
1269	ADVANCED PROCESS SUPPLY, PENNSAUKEN, CAMDEN CO.	395630	750316	3.2	00	2090		1	B

Number of Observations: 16

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
10063W	GLoucester City Bd. of Ed.	3104462	1	395500	750645	F	4.3 07		14		GMR		
10064W	Our Lady of Lourdes Med. Cent.	3104620	1	395532	750525	F	1.5 07		06	257	GMR		250
10108W	CAMDEN CO VOC. & TECH. SCHOOLS	3105139	1	395620	750344	F	2.1 07		15	401	GMR		
10221W	HADDON TOWNSHIP BOARD OF ED.	3104986	1	395435	750319	T	3.9 07		16	165	GMR		100
10250W	BISHOP ELUSTADE PREP SCHOOL	3117894	1	395547	750413	T	2.0 07		27	150	GMR		200
10262W	SCHAEVITZ, LUCAS	3103338	1	395816	750218	T	3.8 07		27		GMR		
	SCHAEVITZ, LUCAS	3103437	2	395816	750218	T	3.8 07		27		GMR		
	SCHAEVITZ, LUCAS	3103444	3	395816	750218	T	3.8 07		27		GMR		
10363W	CERRY HILL INN	UNKNOWN	1	395610	750136	T	4.0 07		16	179	GMR		400
10372W	MORGAN BROTHERS, INC.	3105138	1	395444	750309	F	3.4 07		16	451	GMR		300
10434W	GARDEN STATE RACE TRACK, INC.	5100094	1	395514	750213	T	3.8 07		09	154	GMR		300
	GARDEN STATE RACE TRACK, INC.	5100095	2	395500	750200	M	4.1 07		09	150	GMR		400
10453W	CONCORD CHEMICAL CO., INC.	5100154	1	395635	750605	F	0.2 07		02	140	GMR		400
10465W	ELK ASPHALT/WEST BANK GIL	DELAWARE	RIVER	395750	750500	F	1.6 07		27		SDEL		
10549W	SYCAMORE RIDGE APARTMENTS	3127629	3	395725	750151	T	3.8 07		27		GMR		45
10677W	CERRY HILL SCHOOL DISTRICT	3137393	1	395342	750128		5.3 07		09	164	GMR		162
2035P	GENERAL COLOR CO.	3119275	7	395735	750535		1.1 07		08	194	GMR		180
	GENERAL COLOR CO.	3106064	6	395718	750507		1.1 07		06	184	GMR		0
2145P	MAC ANDREWS & FORBES COMPANY	3100290	1	395507	750729	F	2.2 07		08	103	GMR		300
	MAC ANDREWS & FORBES COMPANY	5100035	2	395500	750745		2.4 07			99	GMR		350
	MAC ANDREWS & FORBES COMPANY	3125580	2R	395508	750728	F	2.2 07		08	140	GMR		350
	MAC ANDREWS & FORBES COMPANY	DELAWARE RIVER		395506	750740	U	2.3 07		06		SDEL		
2146P	G & W NATURAL RESOURCES GROUP	3106642	1R	395314	750748	F	4.3 07		14	261	GMR		600
	G & W NATURAL RESOURCES GROUP	3101210	2	395508	750757	F	4.4 07		14	260	GMR		600
	G & W NATURAL RESOURCES GROUP	3103401	3	395313	750804	F	4.4 07		14	255	GMR		600
	G & W NATURAL RESOURCES GROUP	3103402	4	395308	750744	F	4.4 07		14	251	GMR		600
	G & W NATURAL RESOURCES GROUP	3104454	5	395308	750749	F	4.4 07		14	274	GMR		600
	G & W NATURAL RESOURCES GROUP	BIG TIMBER CR.		395308	750800	U	4.4 07		14		SDBIG		
2206P	COASTAL EAGLE POINT OIL CO.	3100008	3	395223	750918	1	5.7 15		20	288	GMR		600
2299P	TAVISTOCK COUNTRY CLUB	3105248	1	395230	750110		6.5 07		33	247	GMR		300
	TAVISTOCK COUNTRY CLUB	ROAD 1	ROAD 1	395233	750118	T	6.4 07		33		GMR		1050
2365P	SES GLOUCESTER COMPANY, L.P.	DELAWARE RIVER	RM 95.2	395247	750832	T	5.0 20		15		SDDL		
4027PS	GENERAL ELECTRIC AEROSPACE	DELAWARE RIVER		395652	750754	T	1.6 07		06		SDEL		
5010	GLoucester City	3104306	WELL #40	395349	750651		3.4 07		14	262	GMR		1000
	GLoucester City	3127737	WELL #41	395359	750654		3.2 07		14	269	GMR		1000
	GLoucester City	3105242	WELL #42	395343	750652		3.5 07		14	306	GMR		1000
	GLoucester City	3118822	WELL #43	395346	750653		3.5 07		14	260	GMR		1000
5030	BROOKLAWN BOROUGH WATER DEPT.	3104325	1	395242	750732	F	4.8 07		07	327	GMR		300
	BROOKLAWN BOROUGH WATER DEPT.	3114471	3	395243	750733	F	4.8 07		07	330	GMR		350
	BROOKLAWN BOROUGH WATER DEPT.	3119765	4	395247	750737	F	4.7 07		07	293	GMR		350
5152	HADDONFIELD BOROUGH	3102570	1A	395322	750157		5.3 07		17	254	GMR		1000
	HADDONFIELD BOROUGH	5100062	2	395324	750136		5.5 07		17	577	GMR		1000
	HADDONFIELD BOROUGH	3102130	5	395317	750142		5.5 07		17	590	GMR		1000
	HADDONFIELD BOROUGH	3109694	7	395317	750142		5.5 07		17	590	GMR		1000
	HADDONFIELD BOROUGH	3105108	6	395404	750202		4.7 07		17	380	GMR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3105641	BROWNING1A	395627	750404		1.8 07		24	152	GMR		975
	MERCHANTVILLE-PENNSAUKEN WATER	3101417	DEL GARD 2	395800	750417		2.2 07		27	147	GMR		700
	MERCHANTVILLE-PENNSAUKEN WATER	3102915	MARION 1	395720	750225		3.3 07		27	279	GMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3104641	MARION 2	395711	750220		3.3 07		27	262	GMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3104836	BROWNING2A	395628	750406		1.8 07		27	140	GMR		900
	MERCHANTVILLE-PENNSAUKEN WATER	3105110	MAIL HWY 1	395902	750153		4.5 07		27	231	GMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3100010	PARK AVE 1	395800	750117		4.5 07		27	274	GMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	5100064	PARK AVE 2	395800	750118		4.5 07		27	262	GMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3103534	PARK AVE 3	395801	750119		4.4 07		27	277	GMR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3100011	PARK AVE 5	395800	750120		4.4 07		27	290	GMR		1000

WELL#	WYE	SOURCEID	LOCID	LAT	LON	ELACC	DISTANCE	COUNTY	MUN	DEPTH	GE01	GE02	CAPACITY
5195	MERCHANTVILLE-PENNSAUKEN WATER	3114564	PARK AVE 6	395755	750127		4.3	07	27	270	GNR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3119207	MATL HWY 2	395915	750125		5.0	07	27	211	GNR		1000
5201	NEW JERSEY-AMERICAN WATER CO.	3104576	13HIGH-LAND	400002	750044	F	5.0	05	08	197	GNR		700
	NEW JERSEY-AMERICAN WATER CO.	3104864	27HIGH-LAND	400002	750044	F	5.0	05	08	176	GNR		1000
5201	NEW JERSEY-AMERICAN WATER CO.	3105156	50	395726	750518	F	1.1	07	08	170	GNR		700
	NEW JERSEY-AMERICAN WATER CO.	3104790	51	395720	750513	F	1.0	07	08	192	GNR		1300
5202	NEW JERSEY-AMERICAN WATER CO.	3104847	52	395715	750519	F	0.9	07	08	198	GNR		1050
	NEW JERSEY-AMERICAN WATER CO.	3118947	53	395729	750502	F	1.3	07	08	194	GNR		1000
5202	NEW JERSEY-AMERICAN WATER CO.	3118944	54	395731	750458	F	1.4	07	08	195	GNR		1000
	NEW JERSEY-AMERICAN WATER CO.	3120270	55	395718	750518	F	1.0	07	08	176	GNR		1050
5202	NEW JERSEY-AMERICAN WATER CO.	5100008	HADDON 11	395243	750320	F	5.2	07	18	272	GNR		700
	NEW JERSEY-AMERICAN WATER CO.	5100009	HADDON 12	395240	750318	F	5.3	07	18	267	GNR		700
5202	NEW JERSEY-AMERICAN WATER CO.	3101124	HADDON 14	395242	750323	F	5.2	07	18	599	GNR		800
	NEW JERSEY-AMERICAN WATER CO.	3102434	HADDON 15	395238	750316	F	5.3	07	18	597	GNR		800
5202	NEW JERSEY-AMERICAN WATER CO.	3103375	HADDON 20	395231	750312	F	5.4	07	18	267	GNR		700
	NEW JERSEY-AMERICAN WATER CO.	3104778	HADDON 30	395238	750317	F	5.3	07	18	279	GNR		905
5203	NEW JERSEY-AMERICAN WATER CO.	3103308	EGBERT 18	395248	750433	F	4.7	07	18	190	GNR		700
	NEW JERSEY-AMERICAN WATER CO.	3105054	EGBERT 35	395247	750432	F	4.7	07	18	484	GNR		700
5203	NEW JERSEY-AMERICAN WATER CO.	3104051	COLUMBIA22	395609	750028	T	5.0	07	09	453	GNR		1050
	NEW JERSEY-AMERICAN WATER CO.	3104274	COLUMBIA24	395608	750028	T	5.0	07	09	167	GNR		900
5203	NEW JERSEY-AMERICAN WATER CO.	3105033	COLUMBIA31	395609	750028	T	5.0	07	09	427	GNR		1050
	NEW JERSEY-AMERICAN WATER CO.	3100684	ELLIS 13	395442	750100	F	5.0	07	07	527	GNR		1000
5209	NEW JERSEY-AMERICAN WATER CO.	3103305	ELLIS 16	395441	750100	F	5.0	07	09	220	GNR		1100
	NEW JERSEY-AMERICAN WATER CO.	3104098	ELLIS 23	395440	750100	F	5.0	07	09	378	GNR		1200
5209	COLLINGSWOOD BOROUGH	3104053	2R	395519	750432		2.1	07	12	281	GNR		700
	COLLINGSWOOD BOROUGH	3104054	3R	395522	750432		2.1	07	12	290	GNR		800
5209	COLLINGSWOOD BOROUGH	5100030	4	395521	750435		2.1	07	12	304	GNR		570
	COLLINGSWOOD BOROUGH	5100079	5	395521	750439		2.0	07	12	311	GNR		650
5209	COLLINGSWOOD BOROUGH	5100031	6	395525	750424		2.1	07	12	281	GNR		1000
	COLLINGSWOOD BOROUGH	3104799	7	395521	750439		2.0	07	12	312	GNR		1000
5209	COLLINGSWOOD BOROUGH	3104797	8	395426	750514		2.7	07	12	318	GNR		1000
	COLLINGSWOOD BOROUGH	NEWTON CREEK		395425	750515		2.7	07	12		SDL00		1000
5223	BELLMAIR BOROUGH	3119219	6	395225	750640		5.0	07	04	356	GNR		1000
5235	HADDON TOWNSHIP WATER DEPT.	3105243	1A	395406	750317	F	3.9	07	16	481	GNR		870
	HADDON TOWNSHIP WATER DEPT.	3104855	4	395406	750332	F	3.8	07	16	448	GNR		1000
5302	HADDON TOWNSHIP WATER DEPT.	3129099	2A	395335	750330	F	3.9	07	16	487	GNR		800
	HADDON TOWNSHIP WATER DEPT.	3128896	3A	395335	750315	F	4.1	07	16	475	GNR		750
5302	CAMDEN CITY, WATER DIVISION	5100050	MORRIS 1	395938	750220	F	4.7	07	27	107	GNR		1600
	CAMDEN CITY, WATER DIVISION	3100945	MORRIS 3	395933	750231	F	4.5	07	27	107	GNR		1800
5302	CAMDEN CITY, WATER DIVISION	3104252	MORRIS 4	395928	750253	F	4.2	07	27	134	GNR		1600
	CAMDEN CITY, WATER DIVISION	5100051	MORRIS 6	395900	750320	F	3.6	07	27	139	GNR		1700
5302	CAMDEN CITY, WATER DIVISION	5100052	MORRIS 7	395909	750315	F	3.7	07	27	125	GNR		1650
	CAMDEN CITY, WATER DIVISION	3100944	MORRIS 8	395917	750304	F	4.0	07	27	128	GNR		1670
5302	CAMDEN CITY, WATER DIVISION	3104251	MORRIS 10	395919	750302	F	4.0	07	27	118	GNR		1400
	CAMDEN CITY, WATER DIVISION	5100076	MORRIS 9	395906	750313	F	3.7	07	27	148	GNR		1670
5302	CAMDEN CITY, WATER DIVISION	3116814	MORRIS 12	395914	750324	F	3.7	07	27	122	GNR		2030
	CAMDEN CITY, WATER DIVISION	3115745	MORRIS 11	395900	750325	F	3.5	07	27	149	GNR		2030
5302	CAMDEN CITY, WATER DIVISION	3116813	MORRIS 13	395903	750328	F	3.5	07	27	135	GNR		2060
	CAMDEN CITY, WATER DIVISION	5100053	DELAIR 1	395848	750347	F	3.1	07	27	141	GNR		1650
5302	CAMDEN CITY, WATER DIVISION	5100054	DELAIR 2	395850	750348	F	3.2	07	27	146	GNR		1830
	CAMDEN CITY, WATER DIVISION	5100055	DELAIR 3	395851	750344	F	3.2	07	27	135	GNR		1830
5302	CAMDEN CITY, WATER DIVISION	5100056	FLCHACK 1	395844	750318	F	3.4	07	27	141	GNR		1500
	CAMDEN CITY, WATER DIVISION	5100057	FLCHACK 2	395842	750314	F	3.4	07	27	169	GNR		1000
5302	CAMDEN CITY, WATER DIVISION	5100058	FLCHACK 3	395839	750310	F	3.4	07	27	176	GNR		1250
	CAMDEN CITY, WATER DIVISION	5100059	FLCHACK 5	395836	750307	F	3.4	07	27	186	GNR		1324
5302	CAMDEN CITY, WATER DIVISION	3108526A	FLCHACK 7	395835	750304	F	3.4	07	27	180	GNR		2260

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
	CAMDEN CITY, WATER DIVISION	5100060	CITY 7	395457	750640	F	2.1	07	08	163	GWR		1500
	CAMDEN CITY, WATER DIVISION	5100061	CITY 11	395510	750640	F	1.9	07	08	159	GWR		1010
	CAMDEN CITY, WATER DIVISION	3100904	CITY 13	395533	750538	F	1.0	07	08	230	GWR		1200
	CAMDEN CITY, WATER DIVISION	3101250	CITY 17	395346	750533	F	1.2	07	08	270	GWR		1500
	CAMDEN CITY, WATER DIVISION	3109574	CITY 18	395549	750537	F	1.1	07	08	290	GWR		1200
	CAMDEN CITY, WATER DIVISION	3104649	CITY 5	395457	750640		2.1	07	08	171	GWR		1100
5305	MERCHANTVILLE-PENNSAUKEN	3104642	WOODBINE 1	395652	750307		2.6	07	24	258	GWR		1000
	MERCHANTVILLE-PENNSAUKEN	3114563	WOODBINE 2	395652	750307		2.6	07	24	227	GWR		1000
5319	WESTVILLE BOROUGH	3117923	6	395224	750736	F	5.1	15	21	317	GWR		1000

Number of Observations: 120

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MIN	DEPTH	GED1	GED2	CAPACITY
2208P	COASTAL EAGLE POINT OIL CO.	3100008	3	395223	750918	1	5.7	15	20	258	GMR		500
2368P	288 GLOUCESTER COMPANY, L.P.	DELAWARE RIVER	RM 95.2	395247	750832	T	5.0	20	15		SUDEL		
2168P	G & W NATURAL RESOURCES GROUP	3103401	3	395313	750804	F	4.4	07	14	255	GMR		500
2168P	G & W NATURAL RESOURCES GROUP	BIG TIMBER CR.		395308	750800	U	4.4	07	14		SDBIG		
2168P	G & W NATURAL RESOURCES GROUP	3101210	2	395308	750757	F	4.4	07	14	280	GMR		600
4027FS	GENERAL ELECTRIC AEROSPACE	DELAWARE RIVER		395252	750754	T	1.5	07	08		SUDEL		
2168P	G & W NATURAL RESOURCES GROUP	3104454	5	395308	750749	F	4.4	07	14	274	GMR		600
2168P	G & W NATURAL RESOURCES GROUP	3106642	1R	395314	750748	F	4.3	07	14	261	GMR		500
2148P	MAC ANDREWS & FORBES COMPANY	3100035	2	395500	750745		2.4	07		99	GMR		350
2168P	G & W NATURAL RESOURCES GROUP	3103402	4	395308	750744	F	4.4	07	14	281	GMR		600
2148P	MAC ANDREWS & FORBES COMPANY	DELAWARE RIVER		395506	750740	U	2.3	07	08		SUDEL		
5030	BROOKLAWN BOROUGH WATER LEFT.	3119745	4	395247	750737	F	4.7	07	07	293	GMR		350
5319	WESTVILLE BOROUGH	3117923	6	395224	750736	F	5.1	15	21	317	GMR		1000
5030	BROOKLAWN BOROUGH WATER DEPT.	3114471	3	395243	750733	F	4.8	07	07	320	GMR		350
5030	BROOKLAWN BOROUGH WATER DEPT.	3104325	1	395242	750732	F	4.8	07	07	327	GMR		300
2148P	MAC ANDREWS & FORBES COMPANY	3100290	1	395507	750729	F	2.2	07	08	103	GMR		300
2148P	MAC ANDREWS & FORBES COMPANY	3123580	2R	395508	750728	F	2.2	07	08	140	GMR		350
5010	GLOUCESTER CITY	3127737	WELL #41	395359	750654		3.2	07	14	259	GMR		1000
5010	GLOUCESTER CITY	3118822	WELL #43	395346	750653		3.5	07	14	260	GMR		1000
5010	GLOUCESTER CITY	3105242	WELL #42	395343	750652		3.5	07	14	306	GMR		1000
5010	GLOUCESTER CITY	3104306	WELL #40	395349	750651		3.4	07	14	262	GMR		1000
10063M	GLOUCESTER CITY ED. OF ED.	3104452	1	395300	750645	F	4.3	07	14		GMR		
5323	BELLMAIR BOROUGH	3119218	6	395225	750640		5.0	07	04	386	GMR		1000
5302	CAMDEN CITY, WATER DIVISION	5100060	CITY 7	395457	750640	F	2.1	07	08	163	GMR		1500
5302	CAMDEN CITY, WATER DIVISION	5100061	CITY 11	395510	750640	F	1.8	07	08	159	GMR		1010
5302	CAMDEN CITY, WATER DIVISION	3104649	CITY 5	395457	750640		2.1	07	08	171	GMR		1100
10452M	CONCORD CHEMICAL CO., INC.	5100154	1	395635	750606	F	0.2	07	08	140	GMR		400
5302	CAMDEN CITY, WATER DIVISION	3100904	CITY 13	395553	750538	F	1.0	07	08	230	GMR		1200
5302	CAMDEN CITY, WATER DIVISION	3109574	CITY 18	395549	750537	F	1.1	07	08	290	GMR		1200
2038P	GENERAL COLOR CO.	3119275	7	395735	750535		1.1	07	08	194	GMR		180
5302	CAMDEN CITY, WATER DIVISION	3101250	CITY 17	395546	750533	F	1.2	07	08	270	GMR		1500
10064M	OUR LADY OF LOURDES MED. CENT.	3104620	1	395532	750525	F	1.5	07	08	257	GMR		250
5201	NEW JERSEY-AMERICAN WATER CO.	3104847	52	395715	750519	F	0.9	07	08	198	GMR		1050
5201	NEW JERSEY-AMERICAN WATER CO.	3103454	50	395726	750518	F	1.1	07	08	170	GMR		700
5201	NEW JERSEY-AMERICAN WATER CO.	3120270	55	395718	750518	F	1.0	07	08	176	GMR		1050
5209	COLLINGSWOOD BOROUGH	NEWTON CREEK		395425	750515		2.7	07	12		SUL00		1000
5209	COLLINGSWOOD BOROUGH	3104797	8	395426	750514		2.7	07	12	318	GMR		1000
5201	NEW JERSEY-AMERICAN WATER CO.	3104750	51	395720	750513	F	1.0	07	08	192	GMR		1300
2038P	GENERAL COLOR CO.	3105064	6	395718	750507		1.1	07	08	184	GMR		0
5201	NEW JERSEY-AMERICAN WATER CO.	3118947	53	395728	750502	F	1.3	07	08	194	GMR		1000
10465M	ELK ASPHALT/WEST BANK OIL	DELAWARE	RIVER	395750	750500	F	1.6	07	27		SUDEL		
5201	NEW JERSEY-AMERICAN WATER CO.	3118944	54	395731	750458	F	1.4	07	08	195	GMR		1000
5209	COLLINGSWOOD BOROUGH	3100079	5	395521	750439		2.0	07	12	311	GMR		650
5209	COLLINGSWOOD BOROUGH	3104799	7	395521	750439		2.0	07	12	312	GMR		1000
5209	COLLINGSWOOD BOROUGH	5100030	4	395521	750435		2.1	07	12	304	GMR		870
5202	NEW JERSEY-AMERICAN WATER CO.	3103308	EGBERT 18	395248	750433	F	4.7	07	18	190	GMR		700
5202	NEW JERSEY-AMERICAN WATER CO.	3105054	EGBERT 25	395247	750432	F	4.7	07	18	484	GMR		700
5209	COLLINGSWOOD BOROUGH	3104053	2R	395519	750432		2.1	07	12	281	GMR		700
5209	COLLINGSWOOD BOROUGH	3104054	3R	395522	750432		2.1	07	12	290	GMR		800
5209	COLLINGSWOOD BOROUGH	5100031	6	395526	750424		2.1	07	12	281	GMR		1000
5173	MERCHANTVILLE-FENNSAUKEN WATER	3101417	DEL GARD 2	395800	750417		2.2	07	27	147	GMR		700
10250M	BISHOP EUSTACE PREP SCHOOL	3117884	1	395547	750413	T	2.0	07	27	150	GMR		200
5173	MERCHANTVILLE-FENNSAUKEN WATER	3104836	BROWNING2A	395628	750406		1.8	07	27	140	GMR		900
5173	MERCHANTVILLE-FENNSAUKEN WATER	3105641	BROWNING1A	395627	750404		1.8	07	24	152	GMR		875
5302	CAMDEN CITY, WATER DIVISION	5100054	DELAIR 2	395850	750348	F	3.2	07	27	146	GMR		1830
5302	CAMDEN CITY, WATER DIVISION	5100053	DELAIR 1	395848	750347	F	3.1	07	27	141	GMR		1680

WELL#	NAME	SOURCEID	LOCALID	LAT	LONG	LLACD	DISTANCE	COUNTY	FLW	DEPTH	GED1	GED2	CAPACITY
10143W	CAMDEN CO. VEC. & TECH. SCHOOLS	3105139	1	39°56'20"	75°03'44"	F	2.1	07	15	401	GNR		
5201	CAMDEN CITY, WATER DIVISION	5100025	DELAIR 3	39°56'51"	75°03'44"	F	3.2	07	27	135	GNR		1530
5235	HADDON TOWNSHIP WATER DEPT.	3104855	4	39°54'06"	75°03'32"	F	3.8	07	16	442	GNR		1000
5236	HADDON TOWNSHIP WATER DEPT.	3129099	2A	39°53'55"	75°03'30"	F	3.9	07	16	487	GNR		800
5302	CAMDEN CITY, WATER DIVISION	3118613	MORRIS 13	39°59'03"	75°03'28"	F	3.5	07	27	135	GNR		2040
5301	CAMDEN CITY, WATER DIVISION	3115745	MORRIS 11	39°59'00"	75°03'25"	F	3.5	07	27	149	GNR		2030
5302	CAMDEN CITY, WATER DIVISION	3118814	MORRIS 12	39°59'14"	75°03'24"	F	3.7	07	27	122	GNR		2030
5202	NEW JERSEY-AMERICAN WATER CO.	3101124	HADDON 14	39°52'42"	75°03'23"	F	5.2	07	18	598	GNR		800
5202	NEW JERSEY-AMERICAN WATER CO.	5100008	HADDON 11	39°52'43"	75°03'20"	F	5.2	07	18	272	GNR		700
5301	CAMDEN CITY, WATER DIVISION	5100061	MORRIS 6	39°59'00"	75°03'20"	F	3.6	07	27	138	GNR		1700
10221W	HADDON TOWNSHIP BOARD OF ED.	3104986	1	39°54'05"	75°03'18"	T	3.9	07	16	165	GNR		100
5202	NEW JERSEY-AMERICAN WATER CO.	5100009	HADDON 12	39°52'40"	75°03'18"	F	5.3	07	18	267	GNR		700
5302	CAMDEN CITY, WATER DIVISION	5100056	RUCHACK 1	39°58'44"	75°03'18"	F	3.4	07	27	141	GNR		1500
5202	NEW JERSEY-AMERICAN WATER CO.	3104798	HADDON 30	39°52'38"	75°03'17"	F	5.3	07	18	279	GNR		805
5235	HADDON TOWNSHIP WATER DEPT.	3105243	1A	39°54'06"	75°03'17"	F	3.9	07	16	481	GNR		970
5202	NEW JERSEY-AMERICAN WATER CO.	3102434	HADDON 15	39°52'38"	75°03'16"	F	5.3	07	18	597	GNR		800
5235	HADDON TOWNSHIP WATER DEPT.	3128995	3A	39°53'55"	75°03'15"	F	4.1	07	16	475	GNR		750
5302	CAMDEN CITY, WATER DIVISION	5100052	MORRIS 7	39°59'09"	75°03'15"	F	3.7	07	27	125	GNR		1680
5302	CAMDEN CITY, WATER DIVISION	5100057	RUCHACK 2	39°58'42"	75°03'14"	F	3.4	07	27	169	GNR		1000
5302	CAMDEN CITY, WATER DIVISION	5100075	MORRIS 9	39°59'06"	75°03'13"	F	3.7	07	27	148	GNR		1670
5202	NEW JERSEY-AMERICAN WATER CO.	3103375	HADDON 20	39°52'31"	75°03'12"	F	5.4	07	18	267	GNR		700
5302	CAMDEN CITY, WATER DIVISION	5100058	RUCHACK 3	39°58'39"	75°03'10"	F	3.4	07	27	176	GNR		1250
10372W	MURGAN BROTHERS, INC.	3105138	1	39°54'44"	75°03'09"	F	3.4	07	16	451	GNR		300
5302	CAMDEN CITY, WATER DIVISION	5100059	RUCHACK 5	39°58'36"	75°03'07"	F	3.4	07	27	186	GNR		1324
5202	MERCHANTVILLE-PENNSAUKEN	3104642	WOODBINE 1	39°58'52"	75°03'07"	F	2.6	07	24	282	GNR		1000
5202	MERCHANTVILLE-PENNSAUKEN	3114553	WOODBINE 2	39°58'52"	75°03'07"	F	2.6	07	24	227	GNR		1000
5302	CAMDEN CITY, WATER DIVISION	3100944	MORRIS 8	39°59'17"	75°03'04"	F	4.0	07	27	128	GNR		1670
5302	CAMDEN CITY, WATER DIVISION	3108526A	RUCHACK 7	39°58'35"	75°03'04"	F	3.4	07	27	160	GNR		2250
5302	CAMDEN CITY, WATER DIVISION	3104231	MORRIS 10	39°59'19"	75°03'02"	F	4.0	07	27	118	GNR		1400
5302	CAMDEN CITY, WATER DIVISION	3104252	MORRIS 4	39°59'28"	75°02'53"	F	4.2	07	27	134	GNR		1600
5302	CAMDEN CITY, WATER DIVISION	3100945	MORRIS 3	39°59'33"	75°02'31"	F	4.5	07	27	107	GNR		1800
5173	MERCHANTVILLE-PENNSAUKEN WATER	3102915	MARION 1	39°57'20"	75°02'25"	F	3.3	07	27	279	GNR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3104641	MARION 2	39°57'11"	75°02'20"	F	3.3	07	27	262	GNR		1000
5302	CAMDEN CITY, WATER DIVISION	5100050	MORRIS 1	39°59'38"	75°02'20"	F	4.7	07	27	107	GNR		1600
10282W	SCHAEVITZ, LUCAS	3103336	1	39°58'16"	75°02'18"	T	3.8	07	27		GNR		
10282W	SCHAEVITZ, LUCAS	3103437	2	39°58'16"	75°02'18"	T	3.8	07	27		GNR		
10282W	SCHAEVITZ, LUCAS	3103444	3	39°58'16"	75°02'18"	T	3.8	07	27		GNR		
10434W	GARDEN STATE RACE TRACK, INC.	5100094	1	39°55'14"	75°02'13"	T	3.8	07	09	154	GNR		300
5152	HADDONFIELD BOROUGH	3105108	6	39°54'04"	75°02'02"	F	4.7	07	17	380	GNR		1000
10434W	GARDEN STATE RACE TRACK, INC.	5100095	2	39°55'00"	75°02'00"	M	4.1	07	09	150	GNR		400
5152	HADDONFIELD BOROUGH	3102570	1A	39°53'22"	75°01'57"	F	5.3	07	17	254	GNR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3105110	NATL HWY 1	39°59'02"	75°01'53"	F	4.5	07	27	231	GNR		1000
10549W	SYCAMORE RIDGE APARTMENTS	3127627	3	39°57'25"	75°01'51"	T	3.9	07	27		GNR		45
5152	HADDONFIELD BOROUGH	3102130	5	39°53'17"	75°01'42"	F	5.5	07	17	590	GNR		1000
5152	HADDONFIELD BOROUGH	3109494	7	39°53'17"	75°01'42"	F	5.5	07	17	590	GNR		1000
5152	HADDONFIELD BOROUGH	5100062	2	39°53'24"	75°01'38"	F	5.5	07	17	577	GNR		1000
10363W	CHERRY HILL INN	UNKNOWN	1	39°56'10"	75°01'36"	T	4.0	07	16	179	GNR		400
10577W	CHERRY HILL SCHOOL DISTRICT	3137393	1	39°53'42"	75°01'28"	F	5.3	07	09	184	GNR		162
5173	MERCHANTVILLE-PENNSAUKEN WATER	3114564	PARK AVE 6	39°57'55"	75°01'27"	F	4.3	07	27	270	GNR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3115207	NATL HWY 2	39°59'15"	75°01'25"	F	5.0	07	27	211	GNR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3100011	PARK AVE 5	39°58'00"	75°01'20"	F	4.4	07	27	250	GNR		1005
5173	MERCHANTVILLE-PENNSAUKEN WATER	3103534	PARK AVE 3	39°58'01"	75°01'19"	F	4.4	07	27	277	GNR		1000
2299P	TAVISTOCK COUNTRY CLUB	FUND 1	ROAD 1	39°52'33"	75°01'18"	T	6.4	07	33		GNR		1050
5173	MERCHANTVILLE-PENNSAUKEN WATER	5100064	PARK AVE 2	39°58'00"	75°01'18"	F	4.5	07	27	262	GNR		1000
5173	MERCHANTVILLE-PENNSAUKEN WATER	3100010	PARK AVE 1	39°58'00"	75°01'17"	F	4.5	07	27	274	GNR		1005
2299P	TAVISTOCK COUNTRY CLUB	3106246	1	39°52'30"	75°01'10"	F	6.5	07	33	247	GNR		300

Page 3 of PRELIMINARY SURVEY OF WATER WITHDRAWAL POINTS WITHIN 5.0 MILES OF CLEVELAND, OH. (IN ORDER BY DECREASING LONGITUDE) - 11/27/91

NUMBER	NAME	SOURCEID	LOCID	LAT	LN	LLAC	DISTANCE	COUNTY	MIN	DEPTH	GE01	GE02	CAPACITY
S203	NEW JERSEY-AMERICAN WATER CO.	3100684	ELLIS 13	395442	750100	F	5.0	07	09	527	GWR		1000
S203	NEW JERSEY-AMERICAN WATER CO.	3103305	ELLIS 16	395441	750100	F	5.0	07	09	230	GWR		1100
S203	NEW JERSEY-AMERICAN WATER CO.	3104098	ELLIS 23	395440	750100	F	5.0	07	09	378	GWR		1200
S195	NEW JERSEY-AMERICAN WATER CO.	3104576	13HIGHLAND	400002	750044	F	6.0	05	08	197	GWR		700
S195	NEW JERSEY-AMERICAN WATER CO.	3104864	27HIGHLAND	400002	750044	F	6.0	05	08	176	GWR		1000
S203	NEW JERSEY-AMERICAN WATER CO.	3104051	COLUMBIA22	395609	750029	T	5.0	07	09	453	GWR		1050
S203	NEW JERSEY-AMERICAN WATER CO.	3104274	COLUMBIA24	395608	750029	T	5.0	07	09	167	GWR		900
S203	NEW JERSEY-AMERICAN WATER CO.	3105033	COLUMBIA31	395609	750029	T	5.0	07	09	427	GWR		1050

Number of Observations: 120

ATTACHMENT A



NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTRUCTIONS: If you received a preprint label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and below blank. If you did not receive a preprint label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law (Section 3010 of the Resource Conservation and Recovery Act).



INSTALLATION'S EPA I.D. NO.	NJ1071462273
I. NAME OF INSTALLATION	EOREEN INC
II. INSTALLATION MAILING ADDRESS	1625 FEDERAL ST CAMDEN, NJ 08104
III. LOCATION OF INSTALLATION	1625 FEDERAL ST CAMDEN, NJ 08104

FOR OFFICIAL USE ONLY

COMMENTS	
INSTALLATION'S EPA I.D. NUMBER	APPROVED
FNJDC714622731	800818

I. NAME OF INSTALLATION

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX	
3	
CITY OR TOWN	ST. ZIP CODE
4	

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER	
5	
CITY OR TOWN	ST. ZIP CODE
6	

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title)		PHONE NO. (area code & no.)
WOOD DON PLANT MANAGER		215-465-1500

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER	
BORDEN INC.	

B. TYPE OF OWNERSHIP (enter the appropriate letter into box)

F - FEDERAL M - NON-FEDERAL	M
--------------------------------	---

VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es))

<input checked="" type="checkbox"/> A. GENERATION	<input checked="" type="checkbox"/> E. TRANSPORTATION (complete item VII)
<input checked="" type="checkbox"/> C. TREAT/STORE/DISPOSE	<input type="checkbox"/> D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION (transporters only - enter "X" in the appropriate box(es))

<input type="checkbox"/> A. AIR	<input type="checkbox"/> B. RAIL	<input checked="" type="checkbox"/> C. HIGHWAY	<input type="checkbox"/> D. WATER	<input type="checkbox"/> E. OTHER (specify):
---------------------------------	----------------------------------	--	-----------------------------------	--

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA I.D. Number in the space provided below.

<input checked="" type="checkbox"/> A. FIRST NOTIFICATION	<input type="checkbox"/> B. SUBSEQUENT NOTIFICATION (complete item C)
C. INSTALLATION'S EPA I.D. NO.	
NJ107146227	

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

ATTACHMENT A1

WJDO714622792

IX. DESCRIPTION OF HAZARDOUS WASTES (continued from front)

A. HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from non-specific sources your installation handles. Use additional sheets if necessary.

1 F 0 0 2 23 - 26	2 F 0 0 3 23 - 26	3 F 0 0 5 23 - 26	4 23 - 26	5 23 - 26	6 23 - 26
7 23 - 26	8 23 - 26	9 23 - 26	10 23 - 26	11 23 - 26	12 23 - 26

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13 K 0 8 6 23 - 26	14 23 - 26	15 23 - 26	16 23 - 26	17 23 - 26	18 23 - 26
19 23 - 26	20 23 - 26	21 23 - 26	22 23 - 26	23 23 - 26	24 23 - 26
25 23 - 26	26 23 - 26	27 23 - 26	28 23 - 26	29 23 - 26	30 23 - 26

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four-digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31 P 0 3 0 23 - 26	32 U 0 0 2 23 - 26	33 U 0 6 9 23 - 26	34 U 0 8 0 23 - 26	35 U 0 8 8 23 - 26	36 U 1 0 7 23 - 26
37 U 1 1 2 23 - 26	38 U 0 3 1 23 - 26	39 U 1 5 4 23 - 26	40 U 1 5 9 23 - 26	41 U 1 6 1 23 - 26	42 U 1 7 1 23 - 26
43 U 2 2 0 23 - 26	44 U 2 2 6 23 - 26	45 U 2 3 9 23 - 26	46 U 1 0 2 23 - 26	47 U 1 4 0 23 - 26	48 U 0 5 6 23 - 26

D. LISTED INFECTIOUS WASTES. Enter the four-digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49 23 - 26	50 23 - 26	51 23 - 26	52 23 - 26	53 23 - 26	54 23 - 26
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E. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non-listed hazardous wastes your installation handles. (See 40 CFR Parts 261.21 - 261.24.)

☒ 1. IGNITABLE
(D001)

☐ 2. CORROSIVE
(D002)

☐ 3. REACTIVE
(D003)

☒ 4. TOXIC
(D000)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE <i>W. Bailey Barton</i>	NAME & OFFICIAL TITLE (type or print) W Bailey Barton Director Environmental Affairs	DATE SIGNED 8/7/80
--------------------------------------	--	-----------------------

EPA Form 8700-12 (6-80) REVERSE

ATTACHMENT A2

FORM 1 GENERAL	 EPA ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permit Program (See the "General Instructions" before starting)	EPA I.D. NUMBER F N J D 0 7 1 4 6 2 2 7 9 3
LABEL ITEMS I. EPA I.D. NUMBER III. FACILITY NAME V. FACILITY MAILING ADDRESS VI. FACILITY LOCATION		PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, erase through it and enter the correct data in the appropriate fill-in areas below. Also, if any the preprinted data is absent (the area to the left of the label space like the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete items II if no label has been provided. Refer to the instructions for detailed items descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "Yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column. If the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK "X"			SPECIFIC QUESTIONS	MARK "X"		
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		X		D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		X	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing within one-quarter mile of the well bore an underground source of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production. Inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluid for special processes such as: mining of sulfur by the Frasch process; solution mining of minerals; in situ combustion of fossil fuel; or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 **SKIP** Borden Chemical Printing Ink

IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title) Wood, Don, Plant Manager

B. PHONE (area code & no.) 215 465 1500

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX 1625 Federal Street

B. CITY OR TOWN Camden C. STATE NJ D. ZIP CODE 08104

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER 1625 FEDERAL STREET

B. COUNTY NAME CAMDEN

C. CITY OR TOWN CAMDEN D. STATE NJ E. ZIP CODE 08104 F. COUNTY CODE (if known) ATTACHMENT A

A. FIRST										B. SECOND									
(specify)										(specify)									
7. 2, 8, 9, 3 Printing Ink																			
C. THIRD										D. FOURTH									
(specify)										(specify)									
7.																			

VI. OPERATOR INFORMATION

A. NAME: 8. Borden Inc. B. Is the name listed item VIII-A also owner? ☒ YES ☐ NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box. If "Other", specify):
 F - FEDERAL M - PUBLIC (other than federal or state)
 S - STATE O - OTHER (specify) P (specify)
 PR - PRIVATE

D. PHONE (area code & no.): 614 225 4000

E. STREET OR PO BOX: 180 E. Broad Street

F. CITY OR TOWN: Columbus G. STATE: OH H. ZIP CODE: 43215

I. INDIAN LAND: Is the facility located on Indian lands? ☐ YES ☒ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water): 9. N

B. PSD (Air Emissions from Proposed Sources): 9. P

C. UIC (Underground Injection of Fluids): 9. U

D. RCRA (Hazardous Waste): 9. R

E. OTHER (specify): Misc. State Permits

XC. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

F9: A/50

XII. NATURE OF BUSINESS (provide a brief description)

The mixing, blending and dispersing of colorants into printing inks and servicing of the printing industry.

F9: A/51

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print) Robert W. Gutheil, President Borden Chemical	B. SIGNATURE <i>Robert W. Gutheil</i>	C. DATE SIGNED 11/17/80
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COMMENTS FOR OFFICIAL USE ONLY

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

EPA I.D. NO. (enter from page 1)											
3	1	2	3	4	5	6	7	8	9	10	11
F	N	J	D	0	7	1	4	6	2	2	7
										9	3
										17	12

FG: $\frac{A}{55}$

FG: $\frac{N}{56}$

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)

LONGITUDE (degrees, minutes, & seconds)

39 56 43.0

076 06 26.0

VIII. FACILITY OWNER

☒ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER

2. PHONE NO. (area code & no.)

Borden Inc.

614-225-425

3. STREET OR P.O. BOX

4. CITY OR TOWN

5. ST.

6. ZIP CODE

180 E. Broad St.

Columbus

OH

43215

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

Robert W. Gutheil, President
Borden Chemical

Robert W. Gutheil

11/17/80

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

ATTACHMENT A



HA DO WASTE PERMIT APPLICATION

EPA I.D. NUMBER

NJ D 0 7 1 4 6 2 2 7 9

RCRA

(This information is required under Section 3005 of RCRA.)

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)

COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION (place an "X" below and provide the appropriate data)

☒ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

☐ 2. NEW FACILITY (Complete item below.)

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)

FOR NEW FACILITY PROVIDE THE DATE (yr., mo., & day) CONSTRUCTION BEGAN OR EXPECTED TO BEGIN

B. REVISED APPLICATION (place an "X" below and complete Item I above)

☐ 1. FACILITY HAS INTERIM STATUS

☐ 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES - CODES AND DESIGN CAPACITIES

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below describe the process (including its design capacity) in the space provided on the form (Item III-C).

B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.

1. AMOUNT - Enter the amount.

2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:			Treatment:		
CONTAINER (barrel, drum, etc.)	501	GALLONS OR LITERS	TANK	T01	GALLONS PER DAY OR LITERS PER DAY
TANK	502	GALLONS OR LITERS	SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
WASTE PILE	503	CUBIC YARDS OR CUBIC METERS	INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR
SURFACE IMPOUNDMENT	504	GALLONS OR LITERS	OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C)	T04	GALLONS PER DAY OR LITERS PER DAY
Disposal:					
INJECTION WELL	D79	GALLONS OR LITERS			
LANDFILL	D80	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER			
LAND APPLICATION	O51	ACRES OR HECTARES			
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY			
SURFACE IMPOUNDMENT	O85	GALLONS OR LITERS			
UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE
GALLONS	G	LITERS PER DAY	V	ACRE-FEET	
LITERS	L	TONS PER HOUR	O	HECTARE-METER	
CUBIC YARDS	Y	METRIC TONS PER HOUR	W	ACRES	
CUBIC METERS	C	GALLONS PER HOUR	E	HECTARES	
GALLONS PER DAY	D	LITERS PER HOUR	H		

EXAMPLE FOR COMPLETING ITEM IU (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY	FOR OFFICIAL USE ONLY
1	2	3	4	5	6	7	8
X-1	S 0 2	600	G	5			
X-2	T 0 3	20	E	6			
1	S 0 1	150000	G	7			
2				8			
3				9			
4				10			

ATTACHMENT A

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES FOR DESCRIBING OTHER PROCESSES (col. 34"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

OR FOR DESCRIBING OTHER PROCESSES (col. 34").

FOR EACH PROCESS ENTERED HERE

IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart O, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

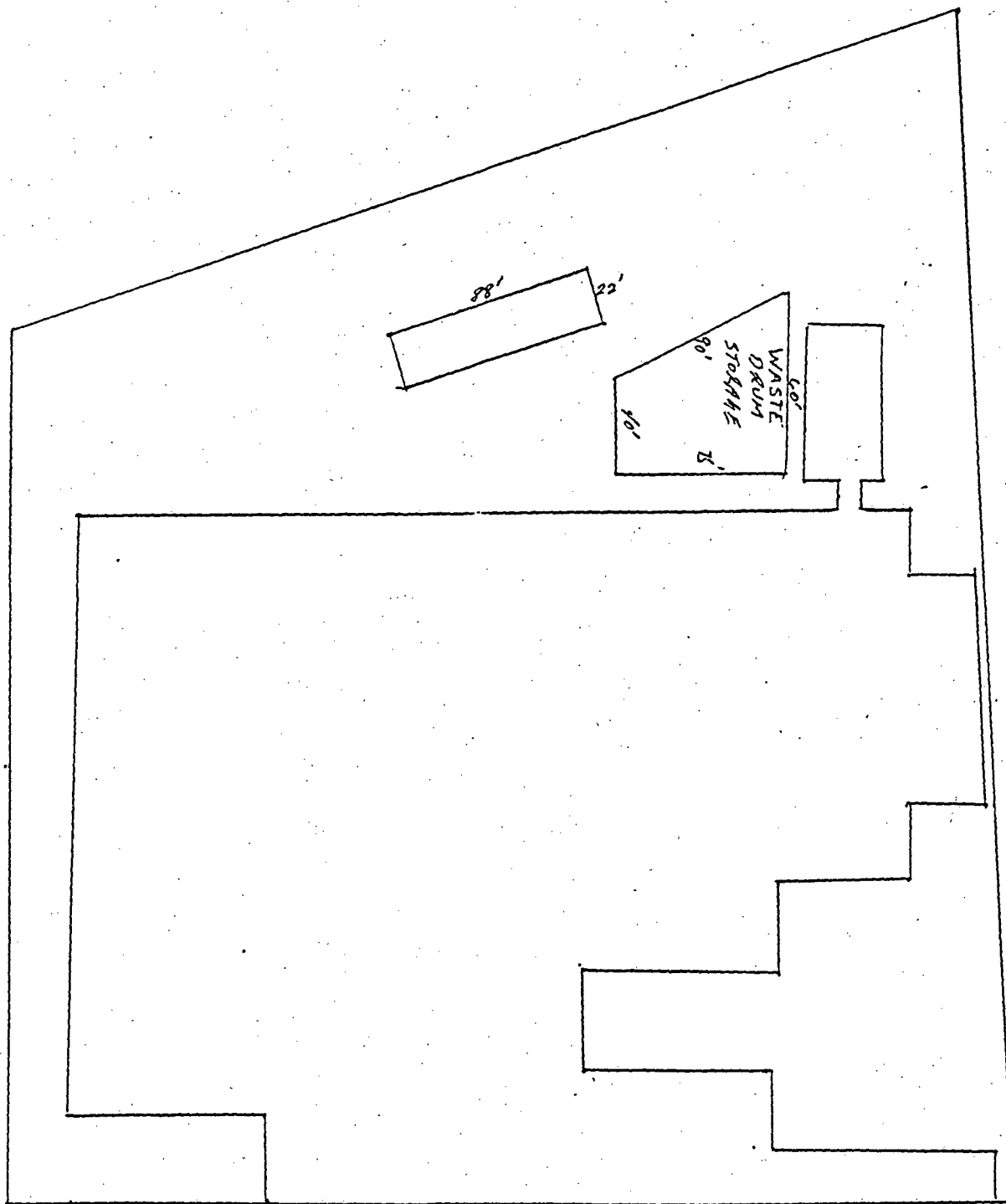
2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEAS- URE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above



BORDEN CHEMICAL
PRINTING INK.
CAMDEN, N.J.

ATTACHMENT B

(6)
RECEIVED
APR 23 10 40 AM '81
ENVIRONMENTAL PROTECTION
AGENCY
NEW YORK, N.Y. 10007

(6)
RCRA GENERATOR INSPECTION FORM

COMPANY NAME: BORDEN INC

(288)
EPA I.D. NUMBER: NJ D071462279

COMPANY ADDRESS: 1625 FEDERAL ST.
CAMDEN, N.J.

COMPANY CONTACT OR OFFICIAL:
Don Woods

INSPECTOR'S NAME: WAYNE HOWITZ

TITLE: DEPT MANAGER

BRANCH/ORGANIZATION: N.J. D.E.P.

CHECK IF FACILITY IS ALSO A TSD
FACILITY 14

DATE OF INSPECTION: 3/25/81

YES NO DON'T
KNOW

(1) Is there reason to believe that the facility has hazardous waste on site? X

a. If yes, what leads you to believe it is hazardous waste?
Check appropriate box:

☐ Company admits that its waste is hazardous during the inspection.

☒ Company admitted the waste is hazardous in its RCRA notification and/or Part A Permit Application.

☐ The waste material is listed in the regulations as a hazardous waste from a nonspecific source (§261.31)

☐ The waste material is listed in the regulations as a hazardous waste from a specific source (§261.32)

☐ The material or product is listed in the regulations as a discarded commercial chemical product (§261.33)

☐ EPA testing has shown characteristics of ignitability, corrosivity, reactivity or extraction procedure toxicity, or has revealed hazardous constituents (please attach analysis report)

☐ Company is unsure but there is reason to believe that waste materials are hazardous. (Explain)

ATTACHMENT B1

YES	NO	DON'T KNOW
-----	----	---------------

- b. Is there reason to believe that there are hazardous wastes on-site which the company claims are merely products or raw materials?

Please explain:

- c. Identity the hazardous wastes that are on-site, and estimate approximate quantities of each.

300 DRUMS OF WASTE
OIL AND WATER BASED INKS.

- d. Describe the activities that result in the generation of hazardous waste.

BORDEN MANUFACTURES OIL BASED AND
WATER BASED INKS.

- (2) Is hazardous waste stored on site?

- a. What is the longest period that it has been accumulated?

- b. Is the date when drums were placed in storage marked on each drum?

- (3) Has hazardous waste been shipped from this facility since November 19, 1980?

- a. If "yes," approximately how many shipments were made?

- (4) Approximately how many hazardous waste shipments off site have been made since November 19, 1980?

- a. Does it appear from the available information that there is a manifest copy available for each hazardous waste shipment that has been made?

- b. If "no" or "don't know," please elaborate.

YES	NO	DO NOT KNOW
-----	----	-------------

c. Does each manifest (or a representative sample) have the following information?

- a manifest document number
- the generator's name, mailing address, telephone number, and EPA identification number
- the name, and EPA identification number of each transporter
- the name, address and EPA identification number of the designated facility and an alternate facility, if any:
- a description of the wastes (DOT)

the total quantity of each hazardous waste by units of weight or volume, and the type and number of containers as loaded into or onto the transport vehicle

- a certification that the materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation under regulations of the Department of Transportation and the EPA

(5) Were there any hazardous wastes stored on site at the time of the inspection?

a. If "yes," do they appear properly packaged (if in containers) or, if in tanks, are the tanks secure?

b. If not properly packaged or in secure tanks, please explain.

THE DRUMS SHOW SEVERE SIGNS OF WEATHERING. ACCORDING TO DON WOODS, THE WASTE MATERIAL IS PUMPED OUT OF THE DRUMS INTO A TANKER.

c. Are containers clearly marked and labelled?

d. Do any containers appear to be leaking?

e. If "yes," approximately how many?

10-15. SPILLAGE IS EVIDENT THROUGHOUT THE DUMP STORAGE AREA.

*(6) Has the generator submitted an annual report to EPA covering the previous calendar year?

a. How do you know?

(7) Has the generator received signed copies (from the TSD facility) of all manifests for wastes shipped off site more than 35 days ago?

a. If "no," have Exception Reports been submitted to EPA covering these shipments?

(8) General comments.

* The effective date for this requirement is March 1, 1982.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

RCRA TSD FACILITY INSPECTION CHECKLIST

APR 23 10 13 AM
ENVIRONMENTAL PROTECTION
AGENCY
NEW YORK, N.Y. 10009

Company's Name: BIRGEN INC

Company's Address: 1625 FEDERAL ST
CAMDEN, N.J.

Contact: Don Woods
PLANT MGR
YES ☒ NO ☐

1. Does the facility have an EPA I.D. number? ☒ ()

2. In what capacity does the facility handle hazardous waste? Circle all appropriate () ()

Storer

Treater

Disposer

File

Drums

Surface Tanks

Subsurface Tanks

Surface Impoundments

Other _____

Filtration

Incineration

Thermal

Chemical

Biological

Other _____

Landfill

Land Treatment

Incineration

Surface Impoundment

Other OFF SITE DISPOSAL

3. Does the facility generate hazardous waste? ☒ ()

4. Does the facility transport hazardous waste? () ☒

5. Does the facility comply with the following () ()

a. Adequate Security () ()

Comments: SITE IS FENCED IN

b. Contingency Plan and Emergency Procedures ☒ ()

Comments: PARTS 265.51, .52, .53, .54, .55 AND .56
COMPLIED WITH

c. Inspection Plan () ☒

Comments: VIOLATION 265.15
NO WRITTEN INSPECTION PLAN

d. Personnel Training () ☒

Comments: VIOLATION 265.16
NO RECORD OF TRAINING FOR PLANT
PERSONNEL

e. Waste Analysis Plan

Comments:

VIOLATION 265.13 - NO RECORD

WASTE ANALYSIS

f. Preparedness and Prevention Plans

Comments:

6. Has the facility filed a part A permit application?

(X)

()

7. Does the facility maintain manifest records?

(X)

()

8. Does the facility have other environmental permits?

()

(X)

a. NPDES

()

()

b. Air

()

()

c. State

--identify

()

()

d. Other

--identify

()

()

9. Identify hazardous wastes handled and method for handling

10. General Comments

Inspected by:

1/13/15 MOUNTAIN

Date:

3/25/81

ATTACHMENT B6

GEN.	TRANS.	TSDF	INSPECTION DATE	RCRA VIOLATION CITED
X	X	X	3/31/81	None
X	X	X	3/27/81	263.20 263.21 263.22 265.15 265.51, .52 .53 and .54 265.16
	X		3/27/81	
X	X	X	4/3/81	265.17 265.13
X		X	3/25/81	262.40 (a) and (d)
X			3/25/81	None
X	X	X	3/25/81	265.15 265.16 265.13
X	X		3/25/81	262.21 (a) and (b)
X	X	X	3/25/81	

APR 23 1981
ENVIRONMENTAL
NEW YORK

ATTACHMENT C

RCRA INSPECTION FORM

Report Prepared for:

Generator ☒

Transporter ☐

HWM (TSD) facility ☒

} FILED
with
his status

Copy of report sent to the facility ☐

Facility Information

Name: BORDEN CHEMICAL PRINTING INK

Address: 1625 FEDERAL ST.
CAMDEN CITY, N.J.

County: CAMDEN

EPA ID#: NJD071462279

Date of Inspection: 5-24-83

Participating Personnel

State or EPA Personnel: ALBERT FRALINGER

Facility Personnel: DAILEY BARTON via telephone
614-225-4292

Report Prepared by Name: ALBERT FRALINGER

Agency: DEP-DWM BEN LION

Telephone #: 609-859-2958

Approved for the Director by: _____

ATTACHMENT C1

Summary of Findings

Facility Description and Operations

the Facility is no longer in operation and has gone through closure certification. The property is presently on the market and is expected to be sold some time during the month of June, 1983. The company in their manufacturing of inks and related chemical material generated a spent solvent that was stored in a tank on site.

The past activity of the Facility can be found in W. Howitz 3-25-81 RCRA Report

Describe the activities that result in the generation of hazardous waste.

Spent Solvents of Toluene,
Xylene and MIBK along with
Residues of ink and paint from
clean up and flushing activities
on site.

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

NO WASTE FOUND ON SITE.
PROFESSION ENGINEER HAS CERTIFIED
Facility CLOSURE OF HOLDING TANK.
(SEE ATTACHED LETTER) - SENT TO
THIS INSPECTOR BY RAILY BARTON
614-225-4292 OF THE CINCINNATI
OH. OFFICE

ENGINEERING COMPANY - JACOBS
ENGINEERING
MOUNTAIN, N.J.

ATTACHMENT D

PRELIMINARY ASSESSMENT
OFF SITE RECONNAISSANCE
INFORMATION REPORTING FORM

Date: 1-10-89

Site Name: Borden Chemical Printing

TDD: 02-8901-17

Site Address: 1625 Federal St.
Street, Box, etc.

Camden
Town

Camden
County

N. J.
State

NUS Personnel:	Name	Discipline
	<u>Hurt Kandler</u>	<u>technician</u>
	<u>Diane Trube</u>	<u>geologist</u>
	<u>Joe Dvorak</u>	<u>chemist</u>

Weather Conditions (clear, cloudy, rain, snow, etc.):

Clear, 40°

Estimated wind direction and wind speed: 0-Smph

Estimated temperature: 40°

Signature: Hurt Kandler

Date: 1-11-89

Countersigned: D Trube

Date: 1/11/89

PRELIMINARY ASSESSMENT
INFORMATION REPORTING FORM

Date: 1-11-89

Site Name: Borden Chemical

TDD: 02-8901-17

Notes (Periodically indicate time of entries in military time):

0956

Railroad tracks border the ^{western} ~~northern~~ side. Debris are scattered throughout the area behind building. Truck tires, pallets, piping and broken up black top. Loading dock in rear. Back area in grass except for 20' x 20' concrete ^{pad} sections. No direct migration route to Cooper River. North side of building ~~is~~ along access road is inactive but a sign (Demolished Team) is at the entrance. The eastern side appears active. Entrance facing Federal Street (Rich-Ox Industries). South side is paved parking lot and active tire shop and theft store.

North side ~~is~~ 1st building is active lumber storage.

Rich-Ox Industries now in building at 1625 Federal St.

(609)-541-1427 Building appears active.

Leaving site 0958

Demolished Team

Signature: Hunt Tuller

Date: 1-11-89

Countersignature: Diane Lube

Date: 1-11-89

BORDEN CHEMICAL PRINTING

Lat: 39°56'43"N

Long: 75°06'26"W

List of Dataset: NJJ4

Number of Records = 6

Group = 1

REC #	POP	HOUSE	DISTANCE	SECTOR
1	14	4	0.400000	1
2	3505	1002	0.810000	1
3	26391	8078	1.600000	1
4	50114	17270	3.200000	1
5	154242	60548	4.800000	1
6	286439	111764	6.400000	1

Rec #	Distance	Population	Houses
1	1/4 mile	14	4
2	1/2 mile	3,519	1,006
3	1 mile	29,910	9,084
4	2 miles	80,024	26,354
5	3 miles	234,266	86,902
6	4 miles	520,705	198,666

ATTACHMENT E

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

-----x
:
In the Matter of :
:
:

COMPLAINT, COMPLIANCE ORDER.
AND NOTICE OF OPPORTUNITY
FOR HEARING

BORDEN CHEMICAL, PRINTING INK DIVISION, :
NJDO71462279 :

Respondent. :

Docket No. II RCRA-82-01G1-C

Proceeding Under Section 3008 of the :
Solid Waste Disposal Act, as amended. :
:
:
-----x

COMPLAINT

This administrative proceeding is instituted pursuant to Section 3008 of the Solid Waste Disposal Act, as amended, 42 U.S.C. §6901 et seq. ("the Act"). [Note: Among the statutes amending the Act is the Resource Conservation and Recovery Act, 90 Stat. 2795, P.L. 94-580 (1975).]

The Director of the Enforcement Division of the U.S. Environmental Protection Agency ("EPA"), Region II, Complainant in this proceeding, has determined that Respondent, Borden Chemical, Printing Ink Division, has violated Section 3004 of the Act, 42 U.S.C. §6924 and the regulations promulgated thereunder, as hereinafter specified:

1. Respondent owns and operates a facility located at 1625 Federal Street, Camden, New Jersey ("the facility").

2. By notification dated August 18, 1980, Respondent informed EPA that it conducts activities at the facility involving "hazardous waste," as that term is defined in Section 1004(5) of the Act, 42 U.S.C. §6904(5) and in 40 CFR §261.3. By application dated November 19, 1980, Respondent requested a permit to conduct its hazardous waste activities.

3. By letter dated September 24, 1981, Borden notified EPA that production activity at this facility had terminated on May 31, 1981. Included in this letter was a notice of closure and brief description of its closure procedure.

4. 40 CFR §265.112 requires the owner or operator of a hazardous waste facility to develop and maintain a written closure plan at his facility with a description of how and when the facility will be closed; an estimate of the maximum inventory of wastes during the life of the facility; a description of steps needed to decontaminate facility equipment during closure; and a schedule for final closure. The owner or operator is required to submit this closure plan to the Regional Administrator 180 days before the date he expects to begin closure so that EPA can provide public notice of the closure and approve, modify or disapprove the plan.

Respondent's failure to comply with the above-cited closure requirements in a complete and timely manner is a violation of 40 CFR §265.112.

PROPOSED CIVIL PENALTY

In view of the above-cited violations, and pursuant to the authority of Section 3008 of the Act, Complainant herewith proposes the assessment of a civil penalty in the amount of five thousand dollars (\$5,000.00) against Borden, Inc. for the violations specified hereinabove.

COMPLIANCE ORDER

Based upon the foregoing, and pursuant to the authority of Section 3008 of the Act, Complainant herewith issues the following Compliance Order against Respondent herein:

1. Respondent shall, by no later than sixty (60) days after the date of this Compliance Order, provide EPA with a complete description of its closure process as required by 40 CFR §265.112. At that time, EPA will review Respondent's closure plan to determine whether closure of the facility was adequate.

NOTICE OF LIABILITY FOR ADDITIONAL CIVIL PENALTIES

Pursuant to the terms of Section 3008(a)(3) of the Act, a violator failing to take corrective action within the time specified in a Final Compliance Order is liable for a civil penalty of up to \$25,000 for each day of continued noncompliance. Such continued noncompliance may also result in suspension or revocation of any permits issued to the violator pursuant to the authority of the Act.

NOTICE OF OPPORTUNITY TO REQUEST A HEARING

As provided in Section 3008(b) of the Act, and in accordance with EPA's Consolidated Rules of Practices Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR Part 22, 45 Fed. Reg. 24360 (April 9, 1980) (a copy of which accompanies this Complaint, Compliance Order, and Notice of Opportunity for Hearing), you have the right to request a hearing to contest any material fact set out in the Complaint, or to contest the appropriateness of the proposed penalty, or the terms of the Compliance Order. (Consistent with the provisions of Section 3008(b) of the Act, the hearing provided will be noticed and open to the general public, should you specifically request such a public hearing. In the absence of such a specific request, however, public notice of a scheduled hearing will not be published.)

To avoid being found in default, and having the proposed civil penalty assessed and the Compliance Order confirmed without further proceedings, you must file a written answer to the Complaint, which may include a request for a hearing. Your answer (if any) must be addressed to the Regional Hearing Clerk, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York, 10278, and must be filed within thirty (30) days of your receipt of this Complaint, Compliance Order, and Notice of Opportunity for Hearing. Your answer must clearly and directly admit, deny or explain each of the factual allegations contained in the Complaint, and should contain (1) a clear statement of the facts which constitute the grounds of your defense, and (2) a concise statement of the contentions which you intend to place in issue at the hearing.

The denial of any material fact, or the raising of any affirmative defense, will be construed as a request for a hearing. Failure to deny any of the factual allegations in the Complaint will be deemed to constitute an admission of the undenied allegations. Your failure to file a written answer within thirty (30) days of receipt of this instrument will be deemed to represent your admission of all facts alleged in the Complaint, and a waiver of your right to a formal hearing to contest any of the facts alleged by the Complainant. Your default will result in the final issuance of the Compliance Order, and assessment of the proposed civil penalty, without further proceedings.

INFORMAL SETTLEMENT CONFERENCE

Whether or not you request a hearing, the EPA encourages settlement of this proceeding consistent with the provisions of the Act. At an informal conference with a representative of the Complainant you may comment on the charges and provide whatever additional information you feel is relevant to the disposition of this matter, including any actions you have taken to

correct the violation, and any other special circumstances you care to raise. The Complainant has the authority to modify the amount of the proposed penalty, where appropriate, to reflect any settlement agreement reached with you in such conference, or to recommend that any or all of the charges be dismissed, if the circumstances so warrant. Your request for an informal conference and other questions that you may have regarding this Complaint, Compliance Order, and Notice of Opportunity for Hearing should be directed to Jodi Lee Alper, Attorney, General Enforcement Branch, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York, 10278, telephone (212) 264-1196.

Please note that a request for an informal settlement conference does not extend the thirty (30) day period during which a written answer and request for a hearing must be submitted. The informal conference procedure may be pursued as an alternative to or simultaneously with the adjudicatory hearing procedure. However, no penalty reduction will be made simply because such a conference is held. Any settlement which may be reached as a result of such conference will be embodied in a written Consent Agreement and Final Compliance Order to be Issued by the Regional Administrator of EPA, Region II, and signed by you or your representative. Your signing of such Consent Agreement would constitute a waiver of your right to request a hearing on any matter stipulated to therein.

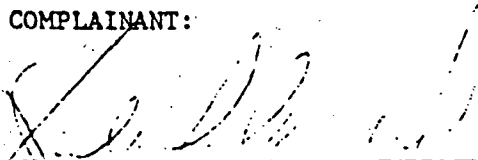
RESOLUTION OF THIS PROCEEDING WITHOUT HEARING OR CONFERENCE

Instead of filing an answer requesting a hearing or requesting an informal settlement conference, you may choose to comply with the terms of the Compliance Order, and to pay the proposed penalty. In that case, payment should be made by sending to the Regional Hearing Clerk, EPA, Region II, a cashier's or certified check in the amount of the penalty specified in the "Proposed Civil Penalty" section of this instrument. Your check must be made payable to the United States of America.

DATED: New York, New York

JANUARY 15 . 1981

COMPLAINANT:



Julio Morales-Sanchez
Director
Enforcement Division
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

ATTACHMENT F

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

In the Matter of

BOBOEN CHEMICAL, PRINTING INK DIVISION
RJD071462279

Respondent.

Proceeding Under Section 3008 of the
Solid Waste Disposal Act, as amended.

CONSENT AGREEMENT

AND

FINAL COMPLIANCE ORDER

Docket No. II RCRA-82-0101-C

PRELIMINARY STATEMENT

This administrative proceeding was Instituted pursuant to Section 3008 of the Solid Waste Disposal Act, as amended, 42 U.S.C. §6901 et seq. ("the Act"). [Note: Among the statutes amending the Act is the Resource Conservation and Recovery Act, 90 Stat. 2795, P.L. 94-580 (1976).]

The Director of the Enforcement Division of the U.S. Environmental Protection Agency ("EPA"), Region II, Complainant in this proceeding, issued a Complaint, Compliance Order and Notice of Opportunity for Hearing to Respondent Borden Chemical, Printing Ink Division on January 15, 1982. Said document charged Respondent with certain violations of Section 3004 of the Act, 42 U.S.C. §6924, and the regulations promulgated thereunder. On February 8, 1982 Respondent filed an Answer denying that it had violated Section 3004 of the Act, 42 U.S.C. §6924, and the regulations promulgated thereunder.

This Consent Agreement and Final Order is being entered into by the parties in full settlement of all liabilities which might have attached as a result of the proceedings. Respondent has read the Final Order set out herein;

ATTACHMENT FI

and, without any admission of liability, believes it to be reasonable and consents to its issuance and its terms. Respondent furthermore waives its right to receive a hearing on the above-referenced Final Consent Order, and agrees to pay a penalty in the amount called for in the Order.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. Respondent owns and operates a facility located at 1625 Federal Street, Camden, New Jersey ("the facility").

2. By notification dated August 18, 1980, Respondent informed EPA that it conducts activities involving "hazardous waste," as that term is defined in Section 1004(5) of the Act, 42 U.S.C. 56903(5) and in 40 CFR §261.3. By application dated November 19, 1980, Respondent requested a permit to conduct its hazardous waste activities.

3. By letter dated September 24, 1981, Borden notified EPA that production activity at this facility had terminated on May 31, 1981. Included in this letter was a notice of closure and a brief description of its closure procedure.

4. 40 CFR §265.112 requires the owner or operator of a hazardous waste facility to develop and maintain a written closure plan at his facility with a description of how and when the facility will be closed; an estimate of the maximum inventory of wastes during the life of the facility; a description of steps needed to decontaminate facility equipment during closure; and a schedule for final closure. The owner or operator is required to submit this closure plan to the Regional Administrator 180 days before the date he expects to begin closure so that EPA can provide public notice of the closure and approve, modify or disapprove the plan. Respondent's failure to comply with the above-cited closure requirements in a complete and timely manner is a violation of 40 CFR §265.112.

FINAL CONSENT ORDER

Based upon the foregoing, and pursuant to Section 3008 of the Act, and Section 22.18 of the Consolidated Rules of Practices Covering the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR §22.18, it is hereby ORDERED that Respondent shall hereinafter comply with all relevant regulations at 40 CFR Parts 261 through 265.

1. Respondent shall, by no later than sixty (60) days after the effective date of this Compliance Order, provide EPA with a complete description of its closure process as required by 40 CFR §265.112. At that time, EPA will review Respondent's closure plan to determine whether closure of the facility was adequate. Respondent alleges that as of the date of this Consent Order, it is in compliance with this Section.

Within sixty (60) days of receipt of a signed and executed copy of this Final Consent Order, Respondent shall pay by cashier's or certified check a civil penalty for the violations cited herein in the amount of three thousand dollars (\$3,000.00), payable to the Treasurer, United States of America. Such payment shall be remitted to the Regional Hearing Clerk, EPA, Region II, 26 Federal Plaza, New York, New York, 10278. Failure to remit such payment in full will result in the referral of this matter to the United States Attorney for collection.

SO ORDERED, EFFECTIVE IMMEDIATELY.

CONSENT

Respondent has read the foregoing Order, and, without any admission of liability, believes it to be reasonable, and consents to its issuance and to its

terms. Furthermore, Respondent explicitly waives its right to request a hearing on this Order, and agrees to pay the penalty amount called for in the Order.

RESPONDENT:

BY: [Signature]
BORDEN CHEMICAL, PRINTING INK DIV.

DATE: 12/22/82

COMPLAINANT:

[Signature]
WARREN H. LLEWELLYN
Acting Director
Enforcement Division
EPA - Region II

DATE: January 12, 1983

The Regional Administrator of EPA, Region II concurs in the above-cited findings. The foregoing Order as agreed upon by the parties is hereby approved and Issued, effective Immediately.

[Signature]
JACQUELINE E. SCHAFER
Regional Administrator
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

DATE: January 18, 1983

ATTACHMENT G

BORDEN CHEMICAL, PRINTING INK DIVISION
Camden, NJ EPA ID #NJDO71462279
Closure - Resource Conservation and Recovery Act (RCRA)

I. Facility Conditions

A. General Information

1. Description of plant activity

Principally, the Borden Chemical Printing Ink plant in Camden processed printing ink which was manufactured from oleo-resinate vehicles into which we dispersed colorants by the use of mixing equipment and three-roll mill dispersers. After processing through this equipment, the materials were packed into shipping containers and distributed to customers.

Another type of ink that we manufactured at the Camden location was water base ink (hydrosperse). These inks had a different resin system and a much lower viscosity in the final product. The type of equipment used was high speed mixing equipment plus semi-continuous media mill for dispersion. Once again, the resin system, water and colorant were mixed and then dispersed. After quality control checks, the final ink was packaged and distributed to customers and/or stock. A third type of product made at the Camden plant was dispersed carbon black in water. The type of equipment was similar to water base ink manufacture except the dispersion equipment was large ball mills -- no mixers were involved.

The Printing Ink plant manufactured oil base printing inks and water base dispersions over the past seven years. The plant has been closed and the equipment and raw materials, as well as finished goods, have been transferred to other plant locations.

2. Size of facility

- (a) Entire site - 8 1/2 acres
- (b) Building space - 125,000 square feet

3. Tanks - storage of product, raw material, fuel oil, and unused tanks left by previous owner of site. No hazardous waste stored in tanks.

- (a) Twenty-four (24) storage tanks - 1,000 gallon volume (see table 1 for status of these tanks before cleaning).

Closure - Resource Conservation and Recovery Act (RCRA) - Camden, NJ

Table 1 Storage Tanks

<u>Tank Numbers</u>	<u>Code Number</u>	<u>Status</u>
1 - 4	06L5011	approximately 3 inches oleo-resinate in bottom
5 - 10	NA	empty, not used by Borden
11 - 15	0653210	empty
16 - 19	0653240	empty
20 - 24	0653226	empty

(b) Six (6) processing tanks - 1,000 gallons

(c) One (1) fuel oil tank - 5,000 gallons

(d) One (1) fuel oil tank - 43,000 gallons

4. Waste storage facility - drum storage

(a) Area - 3,750 square feet

(b) Capacity - five hundred (500) 55-gallon drums

5. No other regulated waste storage facilities.

B. Waste Characterization

1. All the process waste is wash material from the formulation of two (2) products -- paste ink and water-based ink. The water-base ink waste was approximately 70% of the total waste volume. The general break-down of these two products are as follows:

(a) Paste ink - 30% resin (varnish material with small residual of phenols)
20% pigment (no more than 20%, usually less)
50% oil (a high boiling point hydrocarbon-
flash point 500° F)

(b) Water-base ink -30% clay (filler)
20% pigment (no more than 20% usually less)
50% water

Closure - Resource Conservation and Recovery Act (RCRA) - Camden, NJ

2. The hazardous constituents of both the clean-up wastes are the metals which would be present in the pigment portion of the clean-up. The range of these constituents in the final clean-up waste are as follows. (The high end of the range is the concentration in the ink product - unlikely in the waste.)
 - (a) Paste ink waste:

lead	0-320,000 ppm
copper	0-2,700 ppm
hexavalent chromium	0-80,000 ppm
cyanide	0-136,000 ppm
 - (b) Water-base ink waste:

barium	0 - 5 ppm
copper	0 - 2 ppm
hexavalent chromium	0 - 3 ppm
cyanide	0 - 1 ppm
lead	0 - 4 ppm
3. Physical state of the waste
 - (a) Paste ink waste - oily, with approximately 3% solids
 - (b) Water-base ink waste - 90-96% water, <1% solids
4. Specific gravity of the waste
 - (a) Paste ink waste - 1.0 - 1.2
 - (b) Water-base ink waste - 1.0 - 1.1
5. Flash point of the waste
 - (a) Paste ink waste - > 400° F
 - (b) Water-base ink waste - no flash point
6. pH of the waste
 - (a) Paste ink waste - 7.0
 - (b) Water-base ink waste - 6.5 - 8.2
7. The manifests designate two types of waste transported from the site.
 - (a) K086 - water-base ink waste
 - (b) D999 - This is an incorrect designation of the paste ink (solvent) waste. This can also be characterized as K086.

Closure - Resource Conservation and Recovery Act (RCRA) - Camden, NJ

C. Maximum amount of waste inventory ever on-site in any stage of processing - 500 drums.

D. Inventory of auxiliary equipment

1. One (1) boiler
2. Five (5) exhaust fans
3. Ventilators (quantity unknown)
4. One (1) dust collector

E. Schedule of closure

1. Date final process wastes generated - May 1, 1981
2. Date of completion of process waste inventory disposal to off-site facility - May 31, 1981. (no preprocessing required on-site)
3. Date of facility decontamination - May 31, 1982
4. Date of final closure - May 31, 1982
5. Total time required to close the facility - one year, one month
6. Closure activity extends beyond six (6) months because the original closure notification/plan was deemed insufficient by USEPA, Region II.

II. Removing all inventory

A. Maximum amount of waste on-site in any stage of processing - 500 drums.

1. Total amount of waste residue in drums - 750 drums (including clean-up materials)
2. Total number of tanks - 32
 - (a) Tanks stored no waste, but contained product/raw material residue (oleo-resinate and Petroleum oils) to be cleaned.
 - (b) Tank cleaning generated approximately 500 gallons of rinsate to be treated and disposed of by CECOS, International, or other approved facility.
 - (c) Tank cleaning performed by Action Maintenance, Inc.

Closure - Resource Conservation and Recovery Act (RCRA) - Camden, NJ

3. Rinse procedure for tanks
 - (a) Rinse with #2 fuel oil
 - (b) Rinse with organic solvent
 - (c) Clean with high pressure steam to assure no residue
 - (d) Air dry
 4. No other form of waste storage, on-site, i.e., waste piles, basins, drainage pits, surface impoundments, etc.
- B. Pretreatment - no pretreatment of wastes
- C. Methods and procedures for treating, disposing, or removing waste inventory
1. Procedures for on-site inventory treatment or disposal - not applicable
 2. Procedures for off-site removal of inventory
 - (a) Quantity - 734 drums
 - (b) To TSD facility - Atlantic Coast Environmental, Inc.
EPA ID# DED000796300 - Dover, Delaware
 - (c) Waste treated - sawdust solidification (T04)
Landfill disposal - Browning-Ferris Industries Chemical Services, Inc.
Glen Burnie, Maryland

Chemical Waste Management, Inc., Emelle, Alabama

III. Decontaminating the facility

- A. No soil contamination
- B. No contamination of any permanent structure on-site
- C. All equipment and/or facilities requiring cleaning
 1. Description of each piece of equipment (see Table 2)
 2. Procedures for cleaning each piece of equipment (see Table 2)
 3. Destination of each piece of equipment (see Table 2)
 4. Cleaning carried out by Borden Chemical personnel.

Closure - Resource Conservation and Recovery Act (RCRA) - Camden, NJ

IV. Closure Certification - once closure is complete Borden Inc. will contract an independent professional engineer to certify that the site is properly closed.

Table 2

- 7 -

EQUIPMENT INVENTORY

<u>Number of Units</u>	<u>Equipment Description</u>	<u>Cleaning Method</u>	<u>Distination - Border Chemical location</u>
9	100 lb. ink tubs	cleaned & rinsed with kerosenic oil	Fair Lawn, N.J.
4	500 lb. ink tubs	cleaned & rinsed with kerosenic oil	Fair Lawn, NJ
4	1000 lb. ink tubs	cleaned & rinsed with kerosenic oil	Fair Lawn, NJ
1	13"x32" three-roll mill	scraped, then rinsed with kerosenic oil; dried	Fair Lawn, NJ
25,000 lbs.	steel balls (water-based product)	rinsed with water	Woodlawn, OH
1	10' diameter tank stainless steel	clean-surplus equipment	Woodlawn, OH
1	laboratory three-roll mill	scraped, then rinsed with kerosenic oil	Odenton, MD
1	10 horsepower (HP) high speed mixer	rinsed and cleaned with kerosenic oil; dried	Odenton, MD
4	400 lb. ink tubs	cleaned and rinsed with kerosenic oil	Odenton, MD
500 lbs.	steel balls (water-based product)	rinsed with water	Fremont, CA
1	filter	rinsed with organic solvent; dried	Fremont, CA
4	ink tubs 4'diameter 4' high	cleaned and rinsed with kerosenic oil	Lakeland, FL
2	2000 gal. stainless steel tank	clean-surplus equip-ment	Woodlawn, OH
2	100 gal. stainless steel tank	clean - surplus equipment	Woodlawn, OH
1	2000 gal. ball mill (water-based product)	outside jacket was scraped; rinsed with water, inside and out	Woodlawn, OH

ATTACHMENT 67

Table 2
Equipment Inventory (Continued)

2	100 gal. tanks	clean-surplus equipment	Woodlawn, OH
1	50 HP mixer	cleaned with organic solvent; wiped clean	Woodlawn, OH
1	8' diameter ball mill-9' long (water-based product)	rinsed with water	Woodlawn, OH
1	low speed mixer	scraped, then cleaned with kerosenic oil	Woodlawn, OH
1	viking pump	kerosenic oil circulated through	Woodlawn, OH
1	laboratory three-roll mill	cleaned with kerosenic oil	Woodlawn, OH
2	10,000 gal. stainless steel storage tank	clean-surplus equipment	Woodlawn, OH
1	1,000 gal. stainless steel storage tank	clean-surplus equipment	Woodlawn, OH
1	media mill (water-based product)	water circulated through; body of machine scraped clean	Fair Lawn, NJ
6	4' diameter tubs (water-based product)	rinsed with water	Fair Lawn, NJ
1	8" media mill (water-based product)	water circulated through; body of machine scraped clean	Fair Lawn, NJ
1	40 HP mixer (water-based product)	rinsed with water	Odenton, MD
1	Day Pony mixer	scraped and cleaned with kerosenic oil and dried	Sold for scrap
1	Day three-roll mixer	scraped, cleaned with kerosenic oil and dried	Denver, CO
1	three-roll mixer 16" x 40"	scraped, cleaned with kerosenic oil and dried	Lakeland, FL
6	ink tubs, various sizes	scraped, rinsed with kerosenic oil	Denver, CO
1	60-gal. skinner mixer	cleaned and rinsed with kerosenic oil; dried	Fair Lawn, NJ
1	10" media mill (water-based product)	circulated with water, rinsed and drained	Fair Lawn, NJ

Table 2
Equipment Inventory (Continued)

4	filter pump system	cleaned with kerosenic oil, rinsed and dried	Odenton, MD
1	filter pump system	cleaned with kerosenic oil, rinsed and dried	St. Louis, MO
2	three-roll mills	scraped, rinsed with kerosenic oil and drained	Odenton, MD
2	Cowles mixer (water-based product)	rinsed with water and drained	Odenton, MD
6	500 lb. ink tubs	cleaned with kerosenic oil, rinsed and dried	Odenton, MD
20	ink tubs, various sizes	cleaned with kerosenic oil, rinsed and dried	St. Charles, IL
6	ink tubs, various	cleaned with kerosenic oil, rinsed and dried	Atlanta, GA

ATTACHMENT H

①
BORDEN INC

165 N. WASHINGTON AVENUE, COLUMBUS, OHIO 43215



THOMAS R. HEATON
ENVIRONMENTAL SPECIALIST
ENVIRONMENTAL AFFAIRS

March 16, 1983

Mr. Frank Coolick
New Jersey Dept. of
Environmental Protection
32 E. Hanover St.
Trenton, N.J. 08625

Re: Borden Chemical, Camden, N.J.
EPA ID# NJD071462279

Dear Mr. Coolick:

The referenced facility has been closed in accordance with USEPA, Region II direction. The enclosed correspondence provides the chronological background of the closure of this plant.

Borden likewise requests the withdrawal of this facility from the State's hazardous waste program. If you have any questions, please call the undersigned at (614) 225-4860.

Sincerely,

Thomas R. Heaton

Thomas R. Heaton

TRH/slw

Enclosures

cc: w/o enclosures

W. B. Barton
H. A. Rosenzweig
F. Rosenbloom

w/enclosures

Angel Change
NJDEP
32 E. Hanover St.
Trenton, NJ 08625

8 11 AM

ATTACHMENT H1

CLOSURE PROCEDURE

BORDEN CHEMICAL, PRINTING INK DIVISION

CAMDEN, N.J.

Principally, the Borden Chemical Printing Ink plant in Camden processed printing ink which was manufactured from oleo-resinate vehicles into which we dispersed colorants by the use of mixing equipment and three-roll mill dispersers. After processing through this equipment, the materials were packed into shipping containers and distributed to customers.

Another type of ink that we manufactured at the Camden location was water base ink (hydrosperse). These inks had a different resin system and a much lower viscosity in the final product. The type of equipment used was high speed mixing equipment plus semi-continuous media mill for dispersion. Once again, the resin system, water, and colorants were mixed and then dispersed. After quality control checks, the final ink was packaged and distributed to customers and/or stock. A third type of product made at the Camden plant was dispersed carbon black in water. The type of equipment was similar to water base ink manufacture except the dispersion equipment was large ball mills--no mixers were involved.

The Printing Ink plant manufactured oil base printing inks and water base dispersions over the past seven years. The plant has been closed and the equipment and raw materials, as well as finished goods, have been transferred to other plant locations.

Equipment designated as transferable was dismantled, cleaned, and shipped to respective plants. Some of the excess equipment was sold. All the other equipment used at the location has been moved and sold as scrap to an accredited dealer.

Raw material that had not been consumed was shipped to one of several plants that will manufacture the products previously made at the Camden operation. Finished goods that had not been shipped to customers were also transferred to the appropriate plants.

On the second floor of the operating portion of the plant, we had a series of storage tanks that were drained and rinsed with an appropriate solvent; manholes were removed, and tanks were made available for drying. Those tanks that had been on the site, but not used by Borden, had the manholes removed and allowed to dry. These unused tanks remain on-site. The rinsate/residue was properly disposed of as a hazardous waste.

Drums of solid waste were consolidated and properly disposed of. Included in this material was rinse and residue from cleaning equipment, tanks, and obsolete material so designated.

The underground fuel oil storage remains, containing a certain amount of fuel oil that will be transferred to the new owner.

Those areas that have concrete pads for floors were swept clean, and the materials were discarded in a proper manner. The first floor area of the main warehouse, which has a woodblock floor, contained dirt and dust particles; however, the woodblocks are set on top of concrete, so little or no permeation occurred. The roof area was inspected for possible accumulation of waste.

A total of 734 drums of hazardous waste has been removed from Borden Chemical since closure activity was initiated. Enclosed herewith are copies of the New Jersey and Delaware State manifest forms for these wastes. The nature of these wastes are printing ink wastes (general) and varnish wastes, described by EPA identification numbers K086 and D000, respectively. (Please note that the varnish wastes were incorrectly designated as "D999" on shipments with the New Jersey manifest numbers 0011098, 0013272, and 0013267). Table 1 displays the dates of pick-up and disposal, the manifest numbers and the quantities of waste disposed.

Table 1: Shipments of Hazardous Waste from Borden Chemical, Camden, New Jersey

	<u>New Jersey Manifest #</u>	<u>Date of Pick-Up</u>	<u>Number of Drums</u>	<u>Delaware Manifest #</u>	<u>Date Received</u>	<u>Number of Drums</u>
1.	0011094	5-12-81	78	05054	5-14-81	78
2.	0011095	5-13-81	85	05055	5-16-81	85
3.	0011096	5-13-81	83	05058	5-15-81	83
4.	0011097	5-15-81	84	05056	5-16-81	84
5.	0011098	5-15-81	84	05057	5-17-81	84
6.	0013266	5-16-81	87	05059	5-16-81	87
7.	0013268	5-17-81	62	05061	5-17-81	62
8.	0013272	5-16-81	90	05060	5-18-81	90
9.	0013267	5-17-81	81	05043	5-18-81	81

734 total

ATTACHMENT I

FACILITY: Borden Chemical Printing Ink Division

CITY: Camden

EPA ID #: NJDO71462279

DATE OF INSPECTION: 12-18-90

DEP PERSONNEL: Dan Maltese
Bob Raisch

FACILITY PERSONNEL:

NAME

TITLE

Richard Lynch (Rich-Oe Industries)

president

Henry Regan (Former Borden employee)

MONITORING EQUIPMENT: (INCLUDE MODEL AND DEP ID #S)

OVA

HNu

GENERAL FACILITY FINDINGS:

Short explanation of general site operations and history.

Borden operated a printing ink manufacturing company from 1974 until 1983. Cities Service Co. owned the property prior to Borden and also manufactured printing inks. The site is currently owned by Rich-Oe Industries which manufacture wire display racks.

Arrived at the site at 9:15 AM. Rich-Oe Ind. occupies a small front portion of the large, dilapidated warehouse which was once occupied by Borden Chemical. All of the tanks and equipment used by Borden had been removed. The large vertical tanks which were used in the paint manufacturing process and extended through the second floor were also removed. Six large diameter holes (5 ft.) remained in the second story flooring from where the tanks were removed. No wastes were stored on the concrete pad on the west side of the building and no readings were noted on the instruments. The current company does not produce any hazardous wastes. The remaining unused portion of the warehouse was in very poor condition with broken windows, leaking roofs and walls and scattered debris all around.

PAGE 177

LAST UPDATE: 2/11/83

NJ 08104

CLOSDBB DATE:

007 DISTRICT: BASIN: LATITUDE: 395643.0 LONGITUDE: 0750626.0

UJCT: COMMERCIAL: NON-REGULATED: OWNER TYPE: P FACILITT TIPE: GEN TBANS TSDF

OR 43215

OPERATOR ADDRESS
BORDEN INC
180 E BROAD STREET
COLOMBUS
614/225-4000

OH 43215

OH 43215

PERMITS

DESIGN CAPACITY

PERHIT STATUS: 1
NOTIFICATION RECEIVED: 8/18/80
NOTIFICATION ACKNOWLEDGED: 10/09/80
PART A RECEIVED: 11/19/80
(1) PART A ACKNOWLEDGED: 1/15/81
(2) PART A ACKNOWLEDGED:

TYPE NUMBER
I 50145

PROCESS	AMOUNT	UNIT
S01	150.000	G

ROAD

HASTE DESCRIPTION

[illegible]

SUMMARY OF FINDINGS

FACILITY DESCRIPTION AND OPERATIONS

Borden Chemical has moved from
this location 2 yrs. ago.

The address 1625 Federal St Camden now
is owned by Rich Lynch - Trading as "LYNKRAM"
[Rich O Enterprises] this company makes wire display
racks. C. Trautman inspected this new facility

7.57-8200
6751

FACILITY NAME: Borden Chemical

ADDRESS: 1625 Federal Ave

Camden

TIME IN: 1000

COUNTY: Camden

TIME OUT: 1045

EPA ID : NT071462279

DATE OF INSPECTION: March 27, 1985

PHOTOS TAKEN ☐ YES ☒ NO

If yes, how many? _____

SAMPLE TAKEN ☐ YES ☒ NO

NO. OF SAMPLES _____

NJDEP ID # _____

MANIFESTS REVIEWED ☐ YES ☒ NO

Number of manifests in compliance _____

Number of manifests not in compliance _____

List manifest document numbers of those manifests not in compliance.

ATTACHMENT J

11-21-1991

SOUTHERN REGIONAL OFFICE
STACK LOG LISTING
PLANT ID 50145

PLANT-STK	CERT	STATUS	EXP DATE	EQUIPMENT DESIGNATION
50145-000		DELETED		MISCELLANECUS INSPECTIONS
50145-001		DELETED		BOILER NO 1
50145-002		DELETED		BOILER NO 2
50145-003		DELETED		YOUNG MODULAR BAGHOUSE
50145-004		DELETED		ROLLERMILL EXH FAN NO 1
50145-005		DELETED		ROLLERMILL EXH FAN NO 2
50145-006		DELETED		ROLLERMILL EXH FAN NO 3
50145-007		DELETED		ROLLERMILL EXH FAN NO 4
50145-008		DELETED		BLENDER EXH FAN NO 1
50145-009		DELETED		BLENDER EXH FAN NO 2
50145-010		DELETED		BLENDER EXH FAN NO 3
50145-011		DELETED		DISPER EXH FAN NO 1
50145-012		DELETED		DISPER EXH FAN NO 2
50145-013		DELETED		DISPER EXH FAN NO 3
50145-014		DELETED		DISPER EXH FAN NO 4
50145-015		DELETED		STOR TANK EXH FAN

BORDEN INC.

CLOSED 1981

BORDEN CHEMICAL COATINGS - PRINTING

1625 FEDERAL ST.

CAMDEN

ATTACHMENT

J